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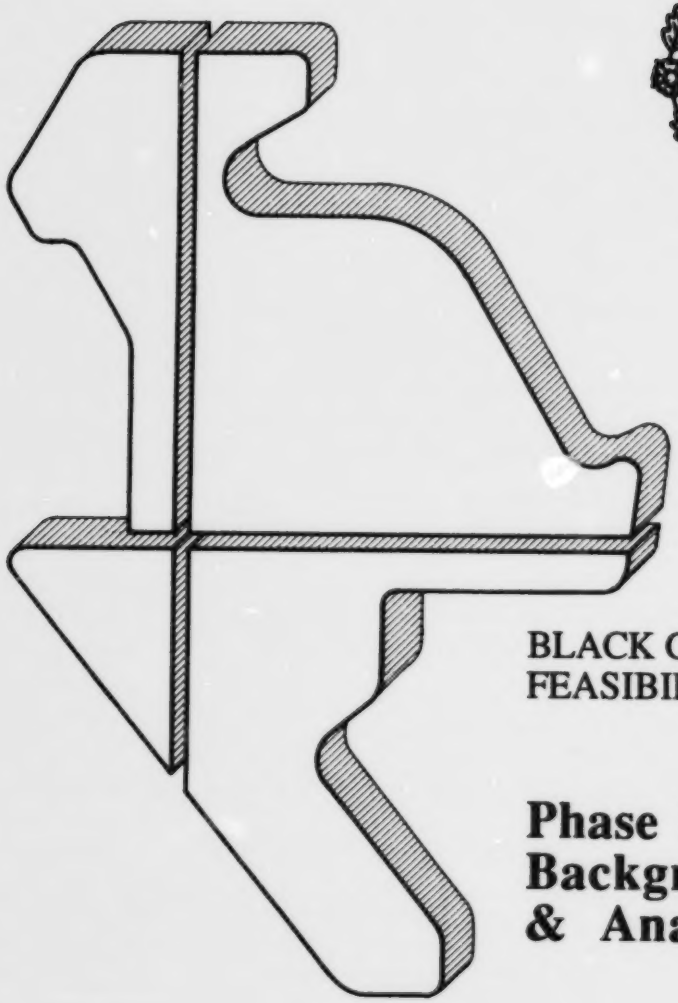

BLACK CREEK CORRIDOR: FEASIBILITY STUDY

Phase I Report: Background Research & Analysis

September 1987

Macaulay Shiomi Howson Ltd.
in association with
Clayton Research Associates Limited
Geo Canada Ltd.
B-A Consulting Group Ltd.

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EXECUTIVE SUMMARY

The Black Creek Corridor Feasibility Study was commissioned by the City of York to address the market potential and development feasibility of this strategically-important area. On the basis of these considerations, this consulting exercise is also to recommend a policy and implementation framework which will facilitate creation of the City's desired corporate/civic centre in the Black Creek Corridor.

This report contains the findings of the first phase of the Study, which was concerned with background research and analysis in the four component areas of consulting review -- market, transportation, geotechnical and planning.

The study area which comprises the defined Black Creek Corridor totals approximately 230 acres, centred on the intersection of Eglinton Avenue West and Black Creek Drive. Actual net development potential is constrained by several factors, including the watercourse and floodplain of Black Creek, and the pattern of existing roads in the area. A variety of land uses can be found in and around the area, although the predominant character of the Corridor is presently defined by the substantial areas of public park and open space focussed on Black Creek itself.

As noted above, this first phase of the Study was broken into four areas of specialized consulting analysis.

o Market Analysis

This component was seen to be critical to the whole exercise, because market potential is so fundamental to determining an appropriate development strategy for the Corridor. A total of four principal land uses were analyzed - office, retail/service commercial, prestige industrial and medium/high density residential - and some qualitative, preliminary comments were made on a fifth potential use -- hotels.

Key market findings include the following:

- as a general finding, there is sufficient market potential for lands in the Corridor to be developed (or redeveloped) in a manner which creates a civic focus as the heart of the City

- a planning horizon of up to 20 years may be required to bring the desired "civic focus" to total fruition

- the significant range of development potentials identified includes: up to 123,000 sq, m./1.3 million sq. ft. of office; up to 2,300 new apartment units; continued mixed industrial-commercial uses on existing industrial lands in the northwest portion of the Corridor; retail/personal service commercial uses ancillary to mixed-use office complexes; an innovative civic square/festival centre with retailing targetted to the income and ethnic mix of York, on the Coronation Park lands; a mid-priced hotel in the context of a mixed use complex at the Black Creek Drive/Eglinton Avenue intersection

- there are a number of parcels where office and residential potentials overlap to create the opportunity for significant mixed-use developments

o Transportation Analysis

This component of the Study focussed in this first phase on an inventory of existing conditions in the transportation network serving the area, and in turn, the likely crder-of-magnitude development potential within the context of the existing and alternative transportation networks.

Using commercial office space as an appropriate "representative" land use (in terms of traffic impact), and based upon certain key transportation planning parameters, the current (short-term) development potential would appear to be in the range of 46,500 sq. m. to 93,000 sq. m. (500,000 to 1,000,000 sq. ft.) without major upgrading to the existing transportation infrastructure serving the Corridor.

With respect to future development potential, in transportation terms, a range of alternative potential improvements was considered for both transit and roads. For the identified transit possibilities, at least a 75% to 100% increase is foreseen in the future development potential compared to the existing transportation network. For the potential road improvements considered, the corresponding increase in the projected development threshold would be at least 100%; furthermore, taking potential road and transit improvements together, future development capacity benefits would be cumulative.

o Geotechnical Investigations

Uncertainty about the extent and nature of historical landfilling activities in the Corridor necessitated appropriate examination of sub-surface conditions. The program included a

review of both existing geotechnical records and drilling of new boreholes in certain strategic locations. Technical analyses covered both physical qualities (eg. soil density, shear strength) and, on a selective basis, chemical testing for soil contaminants.

The geotechnical findings were reviewed with respect to the key parameters which might affect future development potential -- including depth of fill, level and type of contaminants, height of water table and foundation conditions.

These resulting development constraints have been mapped in detail and are summarized on a site-by-site basis in the composite summary chart contained in this report. Key findings include the following:

- most of the Corridor has been subject to extensive filling in the past

- methane gas is found in fairly high concentrations in certain parts of the area (in Coronation Park and on both sides of Eglinton near the Black Creek Drive intersection)

- ground water depths vary considerably, but in a number of key locations, are relatively shallow

- foundation conditions also vary considerably, but generally, deep foundations will be required

- the level of contaminants present in the fill in most of the Corridor should not represent a development constraint -- the significant exceptions are the Hyde/Valley area (metals), and Coronation Park, where the variety and apparent concentration of contaminants found has led to further studies in cooperation with Ministry of the Environment

o <u>Planning Review</u>

The final component of the background work was a review of key planning factors which might exert an influence on the potential of the Black Creek Corridor to fulfill its targetted role as the "principal focus" for the City of York. In this regard, the considerations reviewed included land use, ownership, services, environmental factors, existing planning framework, and development activity.

Key findings from this planning review included the following:

- the Corridor enjoys a degree of relative isolation from adjoining areas, thereby minimizing the potential for adverse impact resulting from major development or redevelopment

- there is a high degree of public land ownership in the subject area, especially of lands in the vicinity of the important Black Creek Drive/Eglinton Avenue intersection

- the existing infrastructure of hard services does not appear to represent any significant constraint to (re)development in the Corridor

- the attractive valley setting provides a significant degree of natural amenity, focussed on a system of public open space along Black Creek itself

- although the development of a principal focus at this location is a clearly-articulated Metropolitan objective, the City's existing policy and zoning framework is seriously inadequate to facilitate the type of integrated, multiple-use corporate/civic centre which is desired

The implications of the various development opportunities and constraints identified in the foregoing technical studies are synthesized on a "composite summary" chart contained in Section 4 of this report. This information is structured on a site-by-site basis, in relation to an accompanying map of "reference areas" for the Corridor, identified as Figure C herein.

The concluding section of the report touches on the important issues to be addressed in the second phase of the study. This phase is to be focussed on a consideration of strategic options for the Black Creek Corridor, guided by the Phase I findings and resulting public input. In addition, the four component studies are attached to the report in full, as appendices for detailed review if desired.

1. INTRODUCTION

Early in 1987, the City of York commissioned a multi-disciplinary consulting study of a strategically-important area known as the Black Creek Corridor. In recognition of the Metropolitan planning initiative to support a principal focus for York in this locale, it is a key objective for the City to foster an integrated, corporate/civic centre in the Black Creek Corridor. This municipal objective is not at present adequately reflected in the City's planning framework, in terms of either appropriate comprehensive policies or a suitable implementation strategy. As a result, the key thrusts of the study are:

- a determination of market potential and development feasibility for the area; and,
- recommendation of a policy and implementation framework to facilitate creation of the desired corporate/civic centre.

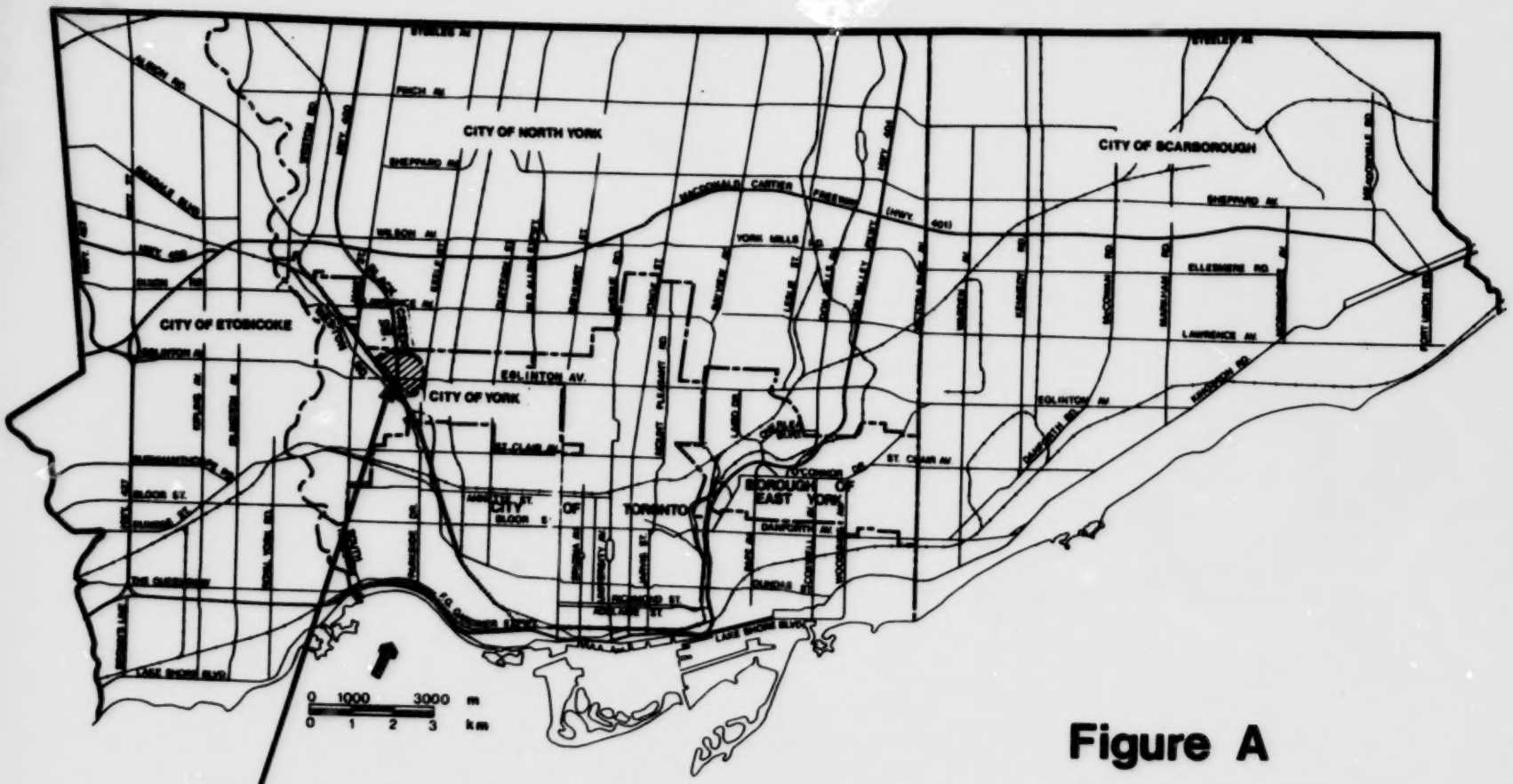
The multi-disciplinary requirements of the study stem from the range of key issues to be addressed in fulfilling the City's objectives. In this regard, there are four components to the work, each represented by a specialist firm on the consulting team:

- **market analysis**, to address market potentials in four key areas of land use - office, retail/service commercial, prestige industrial, and medium/high density residential, including mixed residential and commercial;
- **transportation analysis**, to define the appropriate transportation context for future prospective development in the study area;
- **geotechnical investigations**, to provide a preliminary engineering assessment of sub-surface conditions and related implications for development; and,
- **planning component**, to synthesize the appropriate land use policy and implementation framework for the desired civic focus from the other components of the work, and to coordinate the overall study effort.

The study program has been set up in three phases. Phase I has involved background research and analysis in

the various specialized areas of study, and is focussed on providing solid technical and economic bases for subsequent consideration of strategic options in Phase II. Phase II will zero in on formulation of a recommended strategy, including a development concept, related policy thrusts, and implementation considerations.

The purpose of this report is to describe the findings and conclusions of the study team resulting from the individual and collective efforts in Phase I of the study program. It consists of a relatively brief synthesis of the key issues and considerations arising from this work, which is then augmented by a series of lengthy appendices incorporating the full Phase I reports of the respective consulting disciplines involved.



BLACK CREEK CORRIDOR

Figure A

BLACK CREEK CORRIDOR:
FEASIBILITY STUDY
CITY OF YORK

METROPOLITAN CONTEXT

2. CONTEXT AND GENERAL DESCRIPTION

The subject area of this study, which is identified as the Black Creek Corridor, is located in the west-central part of Metropolitan Toronto, as shown on the accompanying Figure A. It is approximately 4.8 km. (3 miles) south of the Highways 401/400 interchange and a slightly greater distance north of Lake Shore Boulevard/ Queen Elizabeth Way, via Weston Road, Keele Street and Parkside Drive. The Corridor is focussed on Eglinton Avenue West and Black Creek Drive, Eglinton being a major east/west arterial which transects the central part of Metro across its full width. Other major regional arteries in the vicinity include Highway 427, some 9 km. (5.6 mi.) west of the site along Eglinton Avenue, and Allen Road, 4 km. (2.5 mi.) to the east.

In a more local context, the study area is centred on the Black Creek valley, at the southern end of Black Creek Drive, in the central part of the City of York. The study area boundaries are identified on Figure B, and extend from the municipal limits at Trethewey Drive on the north to Nashville Avenue on the south, the latter street being one block north of Rogers Road. Relatively distinct boundaries are formed on the east and west by the C.N./C.P. rail rights-of-way, Trethewey Drive/Keele Street, and the natural edges of the valley itself.

Much of the development in and around the subject area is of an "older" vintage, given the relative "inner-city" type of location involved. The predominant existing land use in the Corridor is public park and open space, focussed on Black Creek itself. Industrial development is concentrated on the developed land west of Black Creek Drive, except for the isolated Hyde Avenue/Valley Crescent industrial pocket east of the creek at the south end of the area. Lands to the east of the creek-related open space system are used for multiple residential, strip commercial and major institutional purposes. Key "landmarks" in the vicinity include major industrial concerns (Kodak Canada and G.M. Gest), major institutional uses (York Municipal Centre, No. 12 Division Police Station, York Board of Education Administration Centre, and York Memorial Collegiate), plus public parks and recreational facilities (Trethewey Park, Coronation Park, and Keelesdale Park/Sportsfield/ Arena).

Total gross area of the Corridor is on the order of 93 hectares (230 acres). Potential net developable area, where actual land use changes might be contemplated, is seen to be considerably less, as a result of:

- existing institutional functions and certain of the open space/recreational facilities which must be retained;

- the water-course and extensive flood plain of the Black Creek itself;

- the pattern of existing roads; and,

- steep slopes in certain locations on the edge of the study area.

Figure C herein indicates those key "reference areas" which the Phase I consulting work has focussed upon, in terms of development potential and feasibility. The particular sites at issue, totalling some 23 in all, are shown on Figure C (with approximate areas) according to the quadrant within which they are located. The Phase I findings and conclusions related to these individual sites will be outlined in some detail in the concluding section of this report, after an overview discussion of the four constituent components of the study.

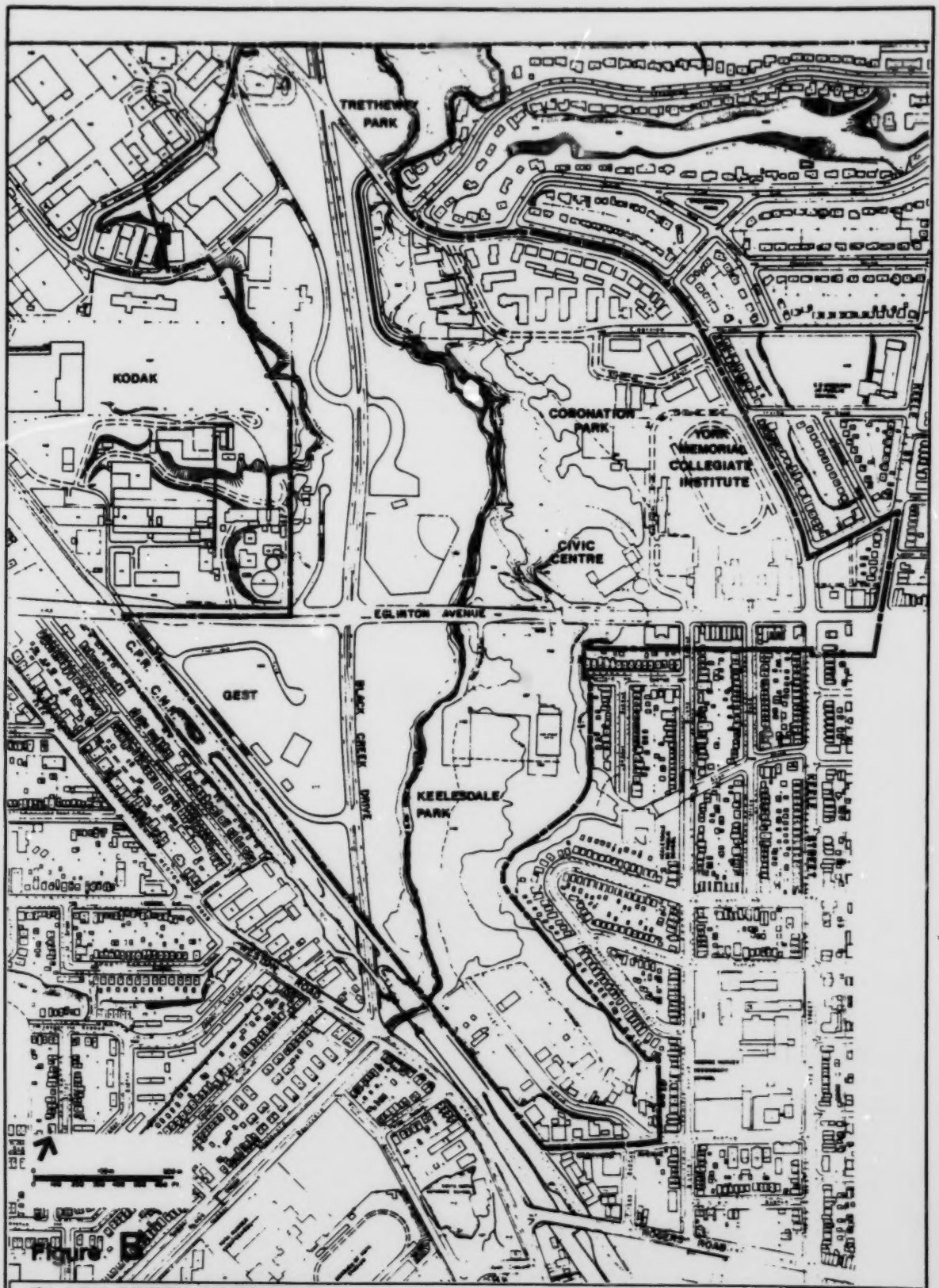


Figure 3

BLACK CREEK CORRIDOR:
FEASIBILITY STUDY
CITY OF YORK

STUDY AREA BOUNDARIES

3. OVERVIEW DISCUSSION OF COMPONENT ANALYSES

As noted at the outset, Phase I of this study has focussed on four inter-related components of consulting analysis - market, transportation, geo-technical and planning. This section will summarize the key aspects of these respective analyses and their implications for the potential and feasibility of future development in the Black Creek Corridor. Further detail is available in each case in the respective appendices attached hereto, which contain the full reports on each of the four components.

3.1 Market Analysis

An examination of market potential is certainly the single most important ingredient in the study program, since the study is intended to be a "market-driven" exercise. As such, the market findings are critical to an appropriate definition of the role, proportions and essential nature of the desired corporate/civic centre.

This critical component was undertaken by Clayton Research Associates Limited. The firm's market research and feasibility methodology was essentially quite similar for each of the four "priority" land uses at issue - office, retail/service commercial, prestige industrial, and medium/high density residential. The key steps in this methodology were as follows:

- general assessment of current market forces in Toronto market area
- area-specific assessment of potential for Black Creek Corridor to attract reasonable share of identified overall market activity
- analysis of Corridor constraints, balanced by consideration of local opportunities
- assessment of Corridor performance in comparison with other competing areas in Toronto market area.

A fifth area of market analysis, related to hotel potential, had originally been identified by City staff, at the "terms-of-reference" stage in the study. However, by the time the study commenced, inquiries from and preliminary discussions with development interests (regarding certain key sites in the centre of the Corridor) indicated some potential interest in mixed use

development including a hotel component at those locations. In the expectation of receiving a hotel market assessment from these prospective proponents, the City narrowed Clayton's focus vis-a-vis the hotel aspect, to simply entail a critical review of that expected hotel market information. However, as of the date of this report, such information has not been forthcoming, and consequently Clayton's comments about hotel potential are necessarily confined to some "qualitative" observations.

As a prelude to exploring the four markets identified, the "city corporate centre concept" was examined in some detail, in terms of the characteristics of the Black Creek Corridor compared with other successful subcentres or "suburban downtowns". The complete details of this comparison are found in Chapter One of the full Clayton report (Appendix "A" attached); the following is a summary of the characteristics found to be common to the successful "downtowns" in other suburban Metro locations:

- a distinctive identity;
- high traffic visibility, notably from an expressway;
- high-rise office towers;
- regional shopping facilities; and,
- effective policies in the municipal Official Plan.

As measured against these criteria, the Black Creek Corridor was found to have sufficient vacant or developable land to accommodate the key higher-order office and retail elements of a successful suburban centre noted above, if a market can be demonstrated. However, in comparison to the other examples of successful suburban downtowns, the Corridor only has moderate visibility to traffic on a major arterial, and none to expressway traffic. In addition, of course, the subject area lacks a distinctive identity and the City's existing planning framework does not provide an effective policy basis or implementation strategy to facilitate development of the desired multi-dimensional centre. Both of these latter shortcomings speak directly to the need for and objectives of this study.

Turning now to the significant market findings, the Clayton work has produced the following conclusions:

- there is a market potential for the vacant land in the Black Creek Corridor to be developed, and certain other parcels in the Corridor to be re-developed, in a manner which creates a civic focus as the heart of the City

- due to market realities, and to the constraints of the Corridor, the creation of a York civic focus will not occur in the short term; the market analysis indicates that a planning horizon of up to 20 years may be required to bring the concept to total fruition

- a significant range of development potentials has been identified:

  - office commercial: up to 123,000 sq.m. (1.3 million sq.ft.), notably on the parcels surrounding the Black Creek Drive and Eglinton Avenue West intersection

  - residential: up to 2,300 new apartment units, notably on the Coronation Park parcel if this parcel is unsuitable for continued park uses

  - continued mixed industrial-commercial uses on the industrial lands in the northwest portion of the Corridor

  - ancillary retail and personal service commercial uses as part of mixed-use commercial office complexes

  - the possibility of an innovative civic square/ festival centre with retailing specifically targeted to the income and ethnic mix of residents of York on the Coronation Park lands if this parcel is not used for residential or park uses; and

  - the possibility of a mixed-use complex at the intersection of Black Creek Drive and Eglinton Avenue West containing a middle- to low-priced hotel.

- there are a number of parcels where commercial office and residential potentials overlap to create the opportunity for significant mixed-use developments

- the possibility was identified to create a distinctive and entertaining environment around a civic square on the Coronation Park parcel; a "European style" square should be a destination event to York residents and other consumers, including tourists; it could animate the centre of the City in non-business hours and could give a marketing edge for the attraction of other commercial, industrial and residential activities to the Black Creek Corridor; the concept should be further tested in market and impact terms.

- no new activity was identified that could start a process of industrial regeneration for the Hyde/Valley/Nashville area; if the area were cleared of the existing uses, and if the contaminated soil were removed or otherwise neutralized, there is a possibility that the area could be used for parkland, or perhaps for social housing; the creation of parkland on this portion of the Black Creek Corridor could theoretically substitute for better located parkland elsewhere in the Corridor (such as Coronation Park or at Black Creek Drive abnd Eglinton), which could then be used for other commercial or residential purposes.

- improvement of the convenience commercial uses on the land parcels fronting Eglinton Avenue West in the eastern section of the Corridor may be encouraged through the formation of a Business Improvement area; in the longer term, these blocks and the residential area immediately to the south could experience increasing pressure for redevelopment; ancillary retail space in the new office towers or mixed-use developments (targeted to the workers and residents of these buildings) should not, in Clayton Research's experience and opinion, detract from the walk-in, neighbourhood trade of the Eglinton Avenue West commercial retail strip.

The site-specific implications of the market findings are summarized in Section 4 of this report.

3.2 Transportation Analysis

In the context of the overall study program, the transportation component, undertaken by B-A Consulting Group Limited, is to focus on the following key issues:

- the capability of the existing transportation infrastructure to support new development within the study area;

- the nature of potential transportation system improvements which could further enhance the accessibility of the subject lands; and,

- the scale of development within the Black Creek Corridor study area which would be consistent with existing/future road and transit system elements

In this first stage of the program, efforts were concentrated on:

- an inventory of existing conditions for the transportation network serving the study area environs; and,

- a determination of likely order-of-magnitude development potential within the context of existing and alternative transportation networks.

The assessment of existing conditions encompassed data collection and analysis of various matters, including traffic volumes, lane availability, driving speeds, transit service, and long-term travel growth due to longer distance traffic movements through the area. The detailed findings on these respective indicators can be found in the full B-A report (Appendix B, attached). These findings were then assessed to identify general strengths and weaknesses in the existing transportation system, in order to develop "order-of-magnitude" estimates of potential study area development which could be reasonably supported by the current transportation network. For this preliminary assessment, it should be noted that commercial office development was chosen as one land use which, in terms of transportation impact, is appropriately representative of the range of land use options under consideration. This is because, on a floor area basis, commercial office development generates a relatively intensive peak hour/peak direction traffic impact; when compared with relative traffic intensities and orientation exhibited by other land uses, accessibility conclusions pertaining to commercial office uses can be translated to other development options.

A preliminary assessment of the capacity of the existing transportation network serving the Corridor required a "translation" of available vehicular access capacity to development potential, based upon certain key parameters related to land use, trip generation rate, and predominant trip distribution. Application of these

parameters has indicated that a current (short-term) development potential in the range of 46,500 sq.m. to 93,000 sq.m. (500,000 sq.ft. to 1,000,000 sq.ft.) of office floor area (or equivalent land use) could reasonably be contemplated without major upgrading to the existing transportation infrastructure. This preliminary "benchmark" development threshold will be subject to refinement in the context the Phase II work on alternative concepts and land use options.

The final step in the first phase of the transportation work entailed a review of a range of alternative potential transportation improvements to address longer-term development implications. The transit alternatives reviewed include implementation of the planned Eglinton West rapid transit line and certain Go Transit improvements (e.g. new station at Eglinton, enhanced service); together, these would provide longer-term potential for creation of a transportation "gateway" in the Black Creek Corridor, offering high accessibility and modal transfer potential as a result of the confluence of these two higher-order transit facilities.

The key future road improvements considered included the widening to six-lanes of Black Creek Drive south through Lawrence Avenue (and potentially beyond), and grade separation of the Black Creek Drive/Lawrence Avenue intersection.

These are seen to have the following order-of-magnitude impacts on future site development potential:

- transit as described - at least 75% to 100% increase in preliminary development threshold for existing transportation
- improvements to Black Creek Drive as described - at least 100% increase.

If such transit and road improvements were taken in tandem, future development capacity benefits are seen to be cumulative.

3.3 Geotechnical Analysis

The geotechnical component of the Phase I work was undertaken by Geo-Canada Ltd. This aspect of the study was necessitated by uncertainty about the extent and nature of historical land-filling activities in the Corridor, and the related implications for future development potential.

The work program entailed a thorough examination of subsurface conditions in the Corridor, based on review of existing geotechnical records (from various public agencies), supplemented by the drilling of 14 new boreholes in strategic locations where:

- there were strong indications or direct knowledge of past filling activity;
- future (re)development potential appeared to be evident; and,
- existing information was not available.

Appropriate technical analyses of the recovered soil samples, at regular intervals, were conducted to determine key qualities such as soil density and consistency, shear strength, and the presence and concentration of methane gas. In addition, certain selected samples were subject to laboratory testing for chemical properties.

The foregoing analysis led to the following general conclusions about subsurface conditions:

- most of the lands in the Black Creek Corridor appear to have been extensively filled in the past, with fill thickness ranging from 1 m (3.3 ft.) to more than 14 m (46.9 ft.); and,
- the underlying natural soil layers below the fill are geologically complex, being quite variable as to depth and physical properties such as density and shear strength.

Examination of both the historical and new data available indicated four important physical factors should be reviewed and analyzed as possible constraints on future development:

- depth of fill present
- level and type of contaminants in the fill
- height of ground water table
- foundation conditions

A series of exhibits which map these key parameters was prepared, and is incorporated in the full Geo-Canada

report attached as Appendix "C" hereto. A number of site-specific preliminary guidelines for development arise from these considerations - these are summarized in Section 4 of this report. As a final point, Geo-Canada has emphasized the need for more detailed site specific geotechnical investigations at the development stage, to confirm foundation conditions and the other physical constraints more accurately.

3.4 Planning Review

The final component of Phase I work was a planning review undertaken by Macaulay Shiomi Howson Ltd. This review was concerned with key planning factors and considerations related to the desired multi-use corporate/civic centre.

It entailed analysis of the following considerations - existing land use, pattern of land ownership, hard servicing infrastructure, rail activity, environmental opportunities and constraints, existing planning policies and controls, and development activity.

The detailed findings on all of these matters can be found in the full Macaulay Shiomi Howson report attached hereto as Appendix "D".

The key conclusions of this planning review are as follows:

- the **locational context and boundaries** of the identified "Black Creek Corridor" study area are such that much of it enjoys a **degree of relative isolation** or separation from adjoining areas; as such, typical concerns engendered by major land use change (particularly high density redevelopment), with respect to compatibility and adverse impact, are lessened by a considerable degree by this relative isolation, especially as compared with most other Metro sub-centre locations involving major development or redevelopment.

- the **high degree of public ownership** of key lands in the Black Creek Corridor is of **substantial benefit** to the City of York in its efforts to initiate and control implementation of the desired corporate/

civic centre concept; on the other hand, the number of public agencies involved and the extent of some of the holdings places special emphasis on the need for proper coordination, both among those agencies and any private sector development interests which become involved (e.g. by joint venture, etc.).

- the existing infrastructure of hard services does not, in principle, appear to represent a constraint to redevelopment and/or intensification of use in the study area; however, additional capacity allocation in terms of Metro trunk services may be required, and from a local perspective, there are a number of areas where new development will require upgrading to local servicing facilities.

- the level of rail activity on the abutting trunk lines for both C.N. and C.P. suggests it is likely significant enough to represent an environmental constraint, especially regarding safety and noise impact on any nearby proposals for residential (re)development.

- given its relative size and strategic location, the future development potential of the playfield/track site affiliated with York Memorial Collegiate bears further exploration with the Board of Education: such consideration should be on the basis of replacement by incorporation of this and/or other educational/recreational facilities within any development scheme which consequently emerges; the apparent potential of this site would be enhanced by the impending obsolescence of the adjacent Police Station.

- the attractive valley setting of the Black Creek Corridor provides a special opportunity to capitalize on a significant degree of natural amenity, by emphasizing the system of public open space along Black Creek as a focus for the planned corporate civic centre - benefits to be achieved would be both recreational and aesthetic.

- development of a "principal focus" for the City of York is clearly seen to be of Metropolitan significance, and thus is expressly stated and supported in the policies of Metroplan.

- the current policies of the City's Official Plan provide an inadequate framework for the multi-dimensional corporate/civic centre which is the City's objective; the Plan's existing "Development

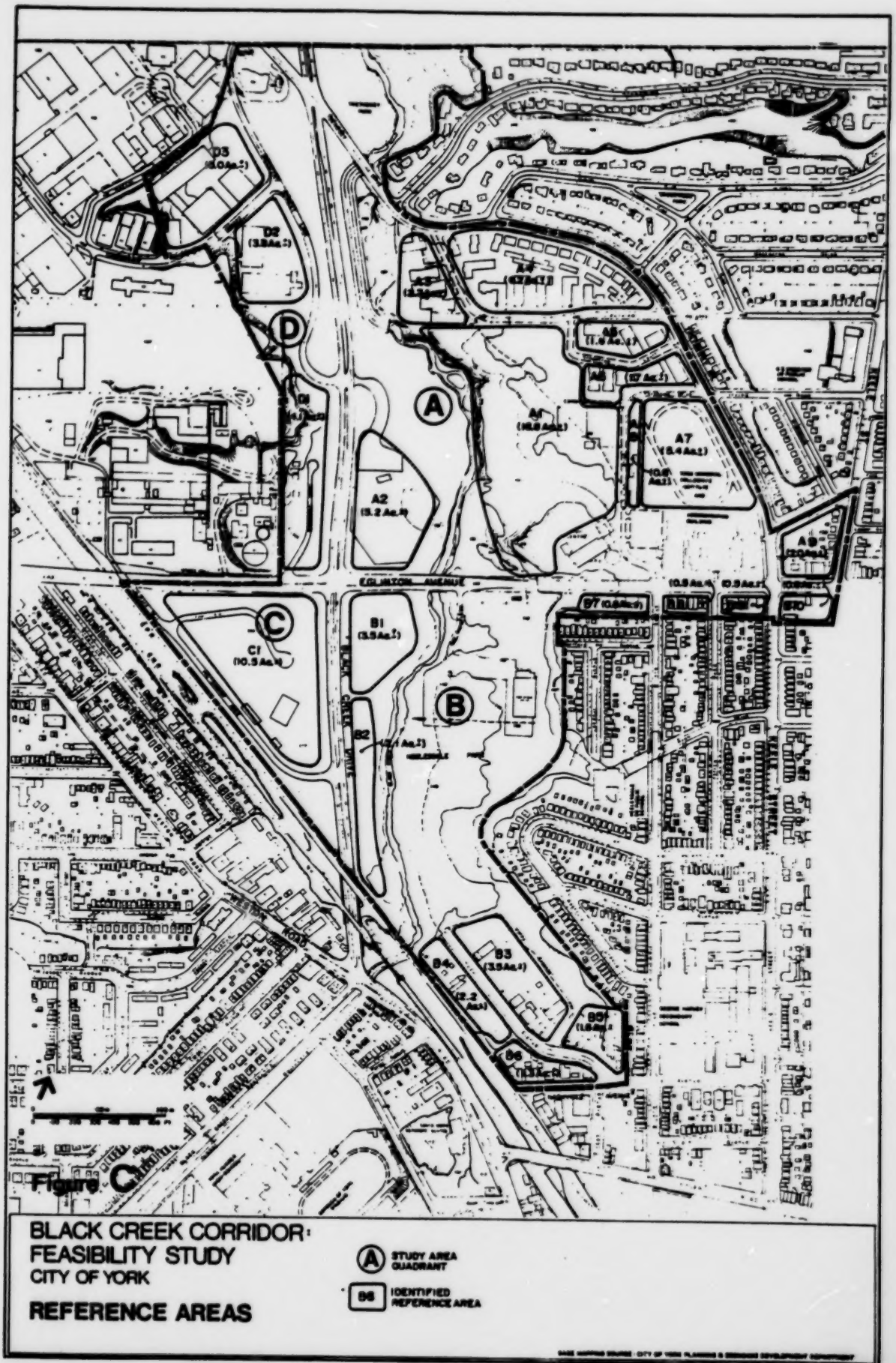
Concept" appears to be focussed only on the major institutional functions at the existing "Municipal Centre", and there is currently no policy or designation basis for an integrated, multiple-use civic focus, which is significantly broader in both functional and spatial terms than the Municipal Centre currently envisaged in the York Official Plan.

- the prevailing zoning in the study area is largely out-of-step with the pattern of existing uses on the ground; it will have to be updated, not only to reflect any land use changes resulting from this study, but also to properly govern existing uses recognized by the Official Plan where no changes are contemplated.

- a number of committed and proposed development projects and several preliminary proposals in and around the Black Creek Corridor would seem to indicate an increasing level of marketplace interest and confidence in the future potential of the area; this interest appears to be largely for development of a nature consistent with the desired corporate/civic centre, including mixed-use schemes encouraging the necessary synergy of activities in the area as a whole.

4. COMPOSITE SUMMARY : SITE-SPECIFIC FINDINGS & CONCLUSIONS

This section provides an important synthesis of all of the technical findings and conclusions resulting from the specialist studies, in a site-by-site context. It attempts to draw together all of the salient information relating to the development potential and feasibility of the identified sites, by inter-relating the consulting findings in a tabular manner which offers a clear, concise assessment of the parcels at issue; these are identified on Figure C (according to quadrant and parcel number) as "reference areas". The last column, (entitled "remarks") of the chart overleaf is intended to highlight some key development considerations for each site, such as special features and characteristics, or significant constraints.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(CLINTON AVENUE)
BLACK CREEK DRIVE
Figure C
BLACK CREEK CORRIDOR:
FEASIBILITY STUDY
CITY OF YORK
REFERENCE AREAS
STUDY AREA QUADRANT
IDENTIFIED REFERENCE AREA

PHASE I COMPOSITE SUMMARY : SITE-SPECIFIC FINDINGS & CONCLUSIONS

Quadrant/Site (See Fig. C)		Approx. Area HA/AC	Existing Uses(s)	MARKET POTENTIALS						CONSTRAINTS							Remarks
				Res.	Indust.	Office	Retail Plaza	Hotel	Mixed Use	Noise	Flood Proofing	Fill	Methane Gas	Water Table	Foundation	Contaminants	
A	A1	6.8/16.8	Park/O.S.	Yes*	No	Yes*	Yes	No	Yes	No	No	up to 14m	Up to 38%	6m+	Deep req'd	Yes	attractive setting; key location; large site; access constrained; several geotech. constraints
	A2	2.1/5.2	Park/O.S.	Yes*	No	Yes*	No	Yes	Yes*	Yes	Possible	1 to 6m+	60%	4 to 5m	Deep req'd	No	key Corridor site due to access., exposure, amenity; some geotech. constraints
	A3,A4 A5,A6	4.8/11.8	Low rise apts/plexes	Yes	-	-	-	-	-	Possible	No	-	-	-	-	-	short/med.term redevel't unlikely (Rental Hsg. Protection Act)
	A7	2.2/5.4	playfield /track	Yes	No	No	Yes	No	No	Possible	No	-	-	-	-	-	large site; redevel't must incorp. school recreation functions
	A8	0.24/0.6	Police Station	Yes	No	No	Yes	No	No	No	No	-	-	-	-	-	current use relocating; small site, should be assembled
	A9	0.8/2.0	Com'l strip Ambulance St. dwellings	Yes	No	No	Yes	No	**	Yes	No	-	-	-	-	-	small site; fractured ownership; integral to Eglinton strip
B	B1	1.4/3.5	Park/O.S.	Yes*	No	Yes*	No	Yes	Yes*	Yes	Possible	3 to 6m+	21%	1.8 to 2.7m	Deep req'd	No	key Corridor site due to access., exposure, amenity; some geotech. constraints
	B2	0.85/2.1	Open space	Yes*	No	No	No	No	No	Yes	Possible	Up to 12m	-	4m	Deep req'd	No	linear, narrow site; valley amenity offset by Black Creek Dr.; some geotech. constraints
	B3,B4 B5,B6	3.5/8.6	Scrap yards gen.indust.	No	***	No	No	No	No	Yes	Yes (B3,B4)	2 to 6m+	0.5%	2 to 3m	Varies	Yes	fractured ownership;poor access., exposure; isolated; contaminated soil; floodprone; foundation requirements vary
	B7	0.32/0.8	low-rise apt.	Yes	No	No	No	No	No	Yes	No	-	-	-	-	-	small site; next to low density resid.; short/med term redevelopment unlikely
	B8,B9 B10	0.73/1.8	Com'l Strips (apts.above)	Yes	No	No	Yes	No	**	Yes	No	-	-	-	-	-	small, shallow blocks; low dens. resid. adjacent; part of Eglinton commercial strip
C	C1	4.2/10.5	Const'n contractor	Yes*	No	Yes*	Yes	Yes	Yes*	Yes	No	1 to 5 m	-	3.6 to 12m	Varies	-	key Corridor site due to access., exposure, parcel size; foundation req'ts vary
D	D1	1.7/4.1	Dwellings open space	No	No	Yes*	No	No	No	Yes	No	Up to 4m	No	0.5m	Deep req'd	No	strategic Corridor location awkward config., ownership and access; constrained by slopes; visual impact from Kodak plant
	D2,D3	3.6/8.8	Light indus. whse/office	No	***	No	No	No	No	Yes	No	No	Possible	2m	Varies	-	convenient access, fair exposure; nearby uses not "prestigious"

* Prime locations for use indicated ** As existing, in commercial strip with apartments above *** As existing

5. NEXT PHASE - STRATEGIC OPTIONS

The next step in the study program, Phase II, will focus on conception and consideration of strategic options for the Black Creek Corridor, guided by the Phase I findings and conclusions, and resulting input from the working groups and the public.

This exercise will particularly emphasize the preparation and testing of alternate development concepts which respond appropriately to the market opportunities identified. An integral aspect of this work will be an assessment of the transportation demands and characteristics of the alternate schemes (in terms of trip generation, directional orientation and mode of travel), and corresponding consideration of required infrastructure improvements.

In addition to the transportation implications, there are several important issues of both a strategic and specific nature to be addressed or resolved in the course of the Phase II work. These are touched on in the attached full market report, (Appendix A) and are further amplified and augmented below:

- The role, image and identity of this proposed corporate/civic centre have to be addressed in a manner which fulfills the abundant potential of the area and achieves the distinctive focus sought by the City.

- The future of the single largest parcel in the Corridor, Coronation Park, is critical, not only in terms of its own development options, but also in a broader sense, recognizing the potential role it could play as a "catalyst" to create significant development momentum for the entire area. The market work has identified several development options including the intriguing prospect of its role as a "city square" focal point, comprising a multi-dimensional "festival centre" which embraces a variety of special commercial and public functions. These matters warrant further exploration in the context of clarified development constraints resulting from the further environmental analysis now underway by the City and M.O.E., relative to soil contamination.

- The feasibility and prospective nature of multi-use development on the large playfield/track site associated with York Memorial Collegiate (area A7 on Figure C) remains a question-mark. This should be explored in greater detail with the Board of Education, to determine whether any such viable options exist; these would have to meet both the Board's functional requirements and at the same time offer development potential complementary to the City's civic centre objectives.

- Another important issue to be tackled which is also related to Coronation Park, but affects other key Corridor sites as well, is the "transferability" of existing park/recreational facilities and functions, that are currently located on parcels with strategic development prospects.

- The desirability of developing "synergy" among the potential development components in the Corridor has to be reflected in efforts to address the optimum combination of uses, particularly on parcels where mixed-use potential is evident.

APPENDIX A

MARKET POTENTIAL AND DEVELOPMENT FEASIBILITY REPORT (PHASE I)

MARKET POTENTIAL AND DEVELOPMENT FEASIBILITY OF THE BLACK CREEK CORRIDOR CITY OF YORK

Phase I Report: Background Research and Analysis

Prepared for

The Planning and Economic Development Department
of
The City of York

By

Clayton Research Associates Limited

September, 1987

EXECUTIVE SUMMARY

The City of York commissioned Clayton Research Associates as one member of a multi-disciplinary consulting team to examine the lands in the Black Creek Corridor to determine, in this first stage of the study, the market potential and development feasibility of the area. This study reports on the market findings of this work.

THE CITY CORPORATE CENTRE CONCEPT

The development of a Civic Focus, also referred to by the City as a City Corporate Centre and a Corporate/Civic/Recreational Centre, is one of the strategic goals in York's current Official Plan. The intent is to enhance the social, cultural and economic life of the community by creating a principal focus for commercial and community activity in the vicinity of the intersection of Eglinton Avenue West and Black Creek Drive.

STUDY METHODOLOGY

For each of the potential commercial, residential and industrial uses, the market research and feasibility methodology is relatively similar. A general assessment of current market forces in the Toronto market area is first undertaken. A site-specific assessment is then made of the potential of the Black Creek Corridor to attract a reasonable share of this overall market activity. An analysis of the constraints of the Corridor are balanced by a consideration of its potential to arrive at a reasonable assessment of its expected performance vis-à-vis other competing areas in the Toronto market area.

The study coordinator, Macaulay Shiomi Howson Ltd., identified 23 parcels within the Black Creek Corridor as potential sites for development or redevelopment. These parcels are inventoried in Exhibit 3, page 9.

MARKET POTENTIAL AND DEVELOPMENT FEASIBILITY FINDINGS

The market potential and feasibility research resulted in the following findings in relation to the 23 development parcels.

- Development Potential Exists for a York Civic Focus

  There is a market potential for the vacant land in the Black Creek Corridor to be developed, and certain other parcels in the Corridor to be redeveloped, in a manner which creates a civic focus as the heart of the City.

- Long Term Planning Horizon Required

  Due to market realities, and to the constraints of the Corridor, the creation of a York Civic Focus will not occur in the short term. The market analysis indicates that a planning horizon of up to 20 years may be required to bring the concept to total fruition.

- Significant Range of Commercial and Residential Development Possible

  The following development potentials have been identified:

  - Office Commercial: Up to 123,000 square metres (1.3 million square feet), notably on the parcels surrounding the Black Creek Drive and Eglinton Avenue West intersection (parcels A2, B1, C1 and D1 and the Coronation Park area, parcel A1);

  - Residential: Up to 2,300 new apartment units, notably on the Coronation Park parcel if this parcel is unsuitable for continued park uses (parcels A1, A2, A4 through A8, B1, B2 and C1);

  - Continued mixed industrial-commercial uses on the industrial lands in the northwest portion of the Corridor in the medium term with the potential of redevelopment for low density office structure in the longer term (parcels D2 and D3);

  - Ancillary retail and personal service commercial uses as part of mixed-use commercial office complexes;

  - The possibility of an innovative civic square/festival centre with retailing specifically targeted to the income and ethnic mix of residents of York on the Coronation Park lands if this parcel is not used for residential or park uses (parcel A1); and

  - The possibility of a mixed-use complex at the intersection of Black Creek Drive and Eglinton Avenue West containing a middle- to low-priced hotel (parcels A2, B1 or C1).

There are a number of parcels where commercial office and residential potentials overlap to create the opportunity for significant mixed-use developments (parcels A1, A2, B1 and C1).

- Possibility of a Lively City Square Focus

The possibility was identified to create a distinctive and entertaining environment around a civic square on the Coronation Park parcel. A "European style" square should be a destination event to York residents and other consumers, including tourists. It could animate the centre of the City in non-business hours and could give a marketing edge for the attraction of other commercial, industrial and residential activities to the Black Creek Corridor. The concept should be further tested in market and impact terms.

- No Industrial Re-Use Foreseen for the Hyde Avenue Area

No new activity was identified that could start a process of industrial regeneration of parcels B3 through B6. If the area were totally cleared of the existing uses, and if the contaminated soil were removed, there is a possibility that the area could be used for parkland or perhaps for social housing. The creation of parkland on this portion of the Black Creek Corridor could theoretically substitute for better located parkland and recreational facilities elsewhere in the Corridor (such as Coronation Park or parcel A-2), which could then be used for commercial or residential purposes.

- Upgrading of the Eglinton Avenue West Retail Strip

Improvement of the convenience commercial uses on the land parcels fronting Eglinton Avenue West in the eastern section of the Corridor may be encouraged in the medium term through the formation of a Business Improvement Area (parcels A9 and B8 through B10). In the longer term this area and the residential area immediately to the south of parcels B7 through B10 could experience increasing pressure for redevelopment.

Ancillary retail space in the new office towers or mixed-use developments (targeted to the workers and residents of these buildings) should not, in Clayton Research's experience and opinion, detract from the walk-in, neighbourhood trade of the Eglinton Avenue West commercial retail strip.

QUESTIONS FOR PHASE TWO

The second phase of the study is the formulation of development options for the Black Creek Corridor and the third phase is the recommendation of an optimal design. Opinions will be sought from both the City of York and the public as input for both phases.

Some difficult questions must be resolved in the second phase of the work:

- The Future of Coronation Park

  The market research identified the possibility of residential, commercial office and, perhaps, commercial retail development on Coronation Park (parcel A1) if a decision is made not to keep the park. The future role of Coronation Park, the largest land parcel in the Black Creek Corridor, is of critical importance in the selection of development options. A "critical mass" of development in the Civic Focus could occur much sooner if Coronation Park were available for residential or commercial purposes.

- The Nature of Mixed-Use Parcels

  The study of development options for the Black Creek Corridor must address the optimum combination of uses on all parcels to obtain a "synergy" of development activity. Synergy is a term that describes the phenomenon of the attractiveness of a development as a whole being greater than the attractiveness of the sum of its parts (since the juxtaposition of different uses creates a dynamic interaction between them).

- The Identity of the York Civic Focus

  When considering the various development options, attention must be given to the identity, image and quality of the massing of buildings and juxtaposition of uses such that a distinctive civic focus for the City of York is created.

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INTRODUCTION

The City of York commissioned Clayton Research Associates as one member of a multi-disciplinary consulting team to examine the lands in the Black Creek Corridor to determine, in the first stage of the study, the market potential and development feasibility of the area. This study reports on the market findings of this work. The second phase of the Black Creek Corridor study will examine strategy options for the lands in the Corridor and, in the third phase, a recommended development strategy will be outlined.

This report is an examination of the potential of the Black Creek Corridor lands to accommodate new commercial (office, retail and hotel), industrial and residential uses. This market review has been conducted with input from other team members on the physical and planning constraints of the various developable parcels in the Corridor. A full interaction of planning, physical, transportation and market concerns will occur in the second stage of the study, the formulation of strategy options. A final stage, the formulation of a recommended development strategy, will be undertaken after Council and public input have been received.

OBJECTIVE OF THE REPORT

The objective of this market report is to provide information for the study team on the market potential and development feasibility of the various land parcels within the Black Creek Corridor. This analysis will serve as the basis for the selection of a recommended development strategy in a latter phase of the study.

The market potential of the Black Creek Corridor is first considered for the overall area surrounding the Eglinton Avenue West and Black Creek Drive intersection (shown on Exhibit 1, page 5), and then individually for a number of land parcels identified by the study coordinator, Macaulay Shiomi Howson Ltd.

STUDY METHODOLOGY

For each of the commercial, residential and industrial markets, the study methodology is relatively similar. A general assessment of current market forces in the Toronto market area is first undertaken.* A site-specific assessment is then made of the

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* The Toronto market area is equivalent to the Statistics Canada definition of the Toronto Census Metropolitan Area in the 1981 Census, an area stretching from Oakville in the west to Ajax in the east and from Lake Ontario to Newmarket in the north.

opportunities in the Black Creek Corridor to attract a share of this overall market activity. An analysis of the constraints of the Corridor is balanced by a consideration of its opportunities to arrive at a reasonable assessment of its expected performance vis-à-vis other competing areas in the Toronto market area over the next 15 to 20 years.

REPORT STRUCTURE

The remainder of this market potential and development feasiblity report is divided into seven chapters:

- Chapter One reviews the viability of a City Corporate Centre Concept for the Black Creek Corridor lands from a market perspective;
- Chapter Two assesses the potential of the Corridor lands for new office uses;
- Chapter Three examines the market support for new industrial uses on the Corridor lands;
- Chapter Four focusses on the potential for new residential apartment units on these lands;
- Chapter Five reviews the market support for new retail and personal service commercial uses in the Black Creek Corridor;
- Chapter Six assesses the potential for hotel commercial uses on the Corridor lands; and
- Chapter Seven draws the different market analyses together in a final conclusion.

BASIS OF THE REPORT

It was felt by members of the consulting team that a 20 year planning and market horizon was appropriate for the study.

This market potential and development feasibility report has been prepared on the basis of the information and assumptions set forth in the text and the accompanying appendix. Clayton Research has attempted to verify this data wherever possible.

However, it is not possible to fully document all factors nor account for all changes that may occur in the future. If, for any reason, major changes occur that influence the information and assumptions set forth in this report, the findings should be reviewed in light of these changed circumstances, and revised, if necessary.

CHAPTER ONE

THE CITY CORPORATE CENTRE CONCEPT

This chapter reviews the concept of a City Corporate Centre in the City of York, provides a general description of the Black Creek Corridor lands and provides a review of the potentially developable sites within the Corridor.

THE CITY CENTRE CONCEPT FROM A MARKET PERSPECTIVE

York's Corporate/Civic/Recreational Centre

The development of a Civic Focus, also referred to by the City as a City Corporate Centre and a Corporate/Civic/Recreational Centre, is one of the strategic goals in York's current Official Plan. The intent is to enhance the social, cultural and economic life of the community by creating a principal focus for commercial and community activity in the vicinity of the intersection of Eglinton Avenue West and Black Creek Drive.

Within the Black Creek Corridor (see Exhibit 1 for the study area boundaries), the City wishes to identify the development potential for office commercial, hotel commercial, retail and service commercial uses, prestige industries and medium or high density residential (or mixed residential/commercial) developments. To date, the City's goal of creating a Civic Focus has not been achieved in the Black Creek Corridor. Other new suburban "downtowns" in the Toronto market area have enjoyed considerable success, however.

A Comparison With Successful Suburban "Downtowns"

Exhibit 2 outlines the salient characteristics of three quite successful suburban downtowns (Mississauga, North York and Scarborough), along with the characteristics of a less successful downtown, Etobicoke,* and the characteristics of the Black Creek Corridor.

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* The Etobicoke city centre referred to here is the civic centre in the area of Burnhamthorpe Road and Highway 427 rather than the proposed Kipling/Islington city centre.

EXHIBIT 1

BLACK CREEK CORRIDOR STUDY AREA
SHOWING POTENTIAL DEVELOPMENT PARCELS

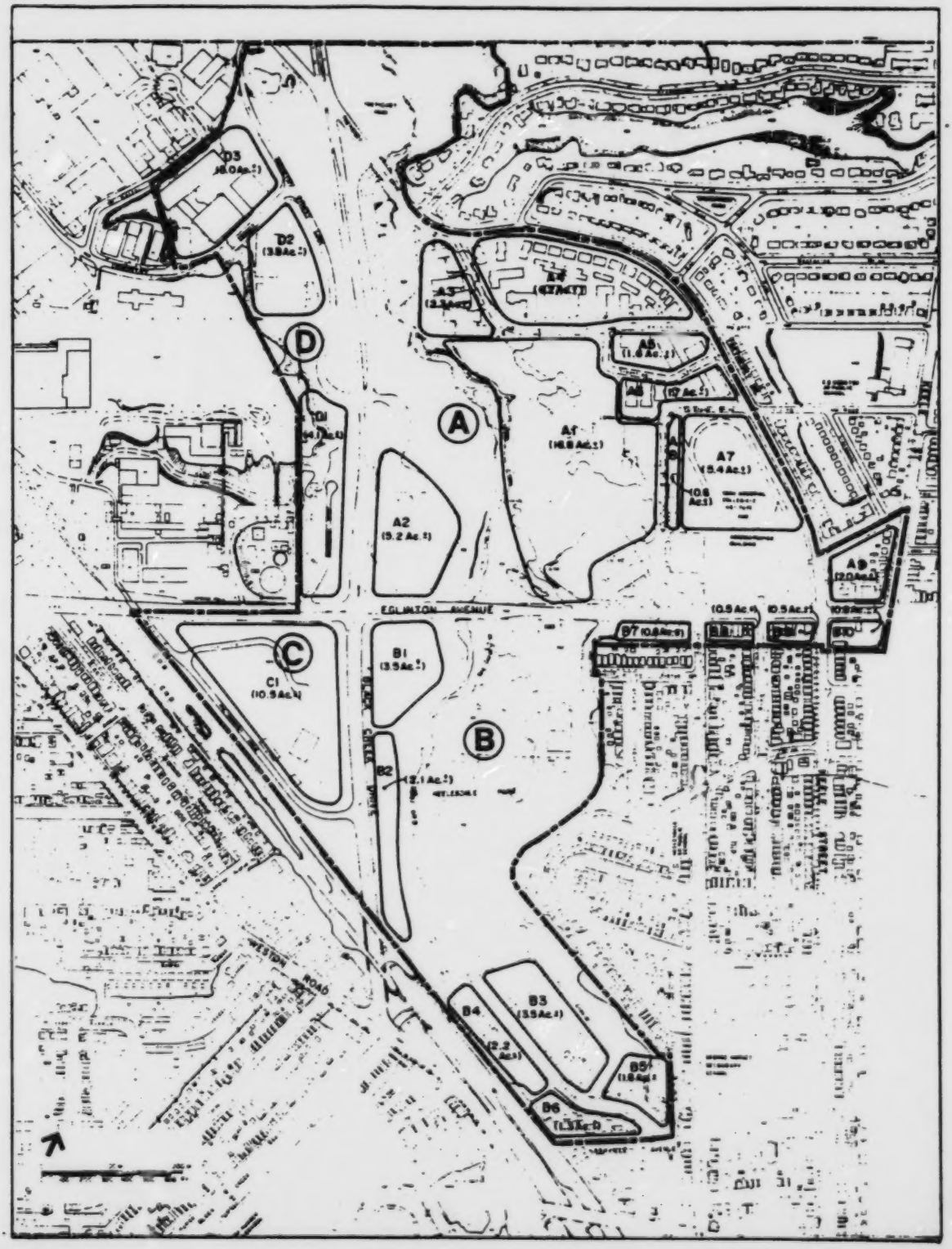

EXHIBIT 2

CHARACTERISTICS OF THE BLACK CREEK CORRIDOR COMPARED TO OTHER SUBURBAN "DOWNTOWNS"

Characteristics	Suburban Downtowns					Characteristic Appears Important for Successful Suburban "Downtowns"
	Mississauga City Centre	North York City Centre	Scarborough City Centre	Etobicoke City Centre[a]	Black Creek Corridor	
Central Area						
Successful Suburban "Downtown"	Yes	Yes	Yes	No	No	
Distinctive Identity	Yes	Yes	Yes	No	No	a
Accessibility						
Highway	403	401	401	427	Black Creek Dr	
High Traffic Visibility	Good	Good	Good	Moderate	Moderate	a
Rapid Transit	No	Yes	Yes	No	No	
Go Transit	Nearby	No	No	No	Possible	
Component Facilities						
High-Rise Office Buildings	Yes	Yes	Yes	Nearby	No	a
Regional Shopping Facilities	Yes	Yes	Yes	No	No	a
Hotel	Yes	Yes	Not Yet	No	No	
High Density Residential	Yes	Yes	Not Yet	Yes	No	
Municipal Offices	Yes	Yes	Yes	Yes	Yes	
Board of Education	Yes	Yes	Yes	Yes	Yes	
Public Recreation	No	No	No	No	Yes	
Vacant Land	Yes	No	Yes	No	Yes	
Natural Environment Features	No	No	No	No	Yes	
Planning Structure						
Effective Policies	Yes	Yes	Yes	No	No	a

[a] Refers to the area around the existing municipal offices at Burnhamthorpe Road and Highway 427 rather than the proposed Kipling/Islington city centre

Source: Clayton Research Associates.

Each of these suburban downtowns have characteristics in common, such as the existence of municipal offices. Thus, the existence of a municipal office is not a characteristic which separates a successful suburban downtown from one that is not as successful in market terms. The following characteristics are, however, unique to the successful downtowns:

- A distinctive identity;
- High traffic visibility, notably from an expressway;
- High-rise office towers;
- Regional shopping facilities; and
- Effective policies in the municipal Official Plan.

The current study effort is an attempt to evolve effective municipal policies to create a distinctive identity for a new commercial core for the City of York. The Black Creek Corridor has sufficient vacant or developable land to accommodate the key elements of a successful suburban downtown, i.e., the high-rise office towers and regional shopping facilities, if there is a demonstrable market. In comparison to other successful suburban downtowns, however, the Black Creek Corridor has only moderate visibility to traffic on a major arterial, and none to expressway traffic.

According to the information presented in Exhibit 2, there appears to be a distinct opportunity presented in the Black Creek Corridor to integrate future commercial and residential development with a rather attractive natural river valley, the Black Creek. However, aesthetics have not been a critical market component in the development of the three successful suburban downtowns in the Toronto market area.

DEVELOPMENT CHARACTERISTICS OF THE BLACK CREEK CORRIDOR

The Black Creek Corridor study area, which was defined by the City of York, is presented in Exhibit 1. Since the intersection of the previously planned Crosstown Expressway with Highway 400 did not materialize, there is a great deal of land in this area that is vacant and in public ownership. An accessible location like that of the corridor, in a relatively central city such as the City of York, would appear to offer a significant opportunity for commercial, industrial and residential development.

The Black Creek Corridor has the following developmental characteristics:

- In total, there are some 93 hectares (230 acres) in the Black Creek Corridor study area, of which 39 hectares (95 acres, some 41 percent of the total area) are currently vacant and undeveloped. Some other lands have sub-optimal uses, such as older walk-up apartments and what appear to be underutilized industrial uses.

  Some of the vacant land is below the floodplain limits of the Metropolitan Toronto and Region Conservation Authority (MTRCA) and much of this land is, in theory, and probably in practice, unusable for development. However, the floodplain lands, the river and the banks of the Black Creek do provide an attractive natural setting for residential and certain forms of commercial development.

- The Black Creek Corridor is divided by two major arterial roads, Black Creek Drive and Eglinton Avenue West. These arterials provide reasonably good accessibility to the north and west and their intersection has one of the highest concentrations of vehicular traffic in the Toronto market area. Eglinton Avenue West is also served by public transit buses. The southwest boundary of the study area is a CN/CP rail line and a GO transit commuter rail line. A GO station may be constructed in the area in the future.

- Anchor activities within the Black Creek Corridor include the City of York municipal offices (160 employees), the York Board of Education offices (192 employees) and the York Memorial Collegiate Institute (91 employees). Construction has begun on a Metropolitan Toronto Police station in the northwest portion of the corridor. Immediately adjacent to the study area on the west is Kodak Canada Inc., which has 1,600 employees.

- In the Black Creek Corridor study area, notably in the northeast quadrant, there are many walk-up apartment buildings which provide some of the most affordable rental accommodation in Metropolitan Toronto.

- The City of York has received various preliminary development proposals for portions of the vacant land in the Black Creek Corridor.

TWENTY-THREE POSSIBLE DEVELOPMENT PARCELS IN THE BLACK CREEK CORRIDOR

Macaulay Shiomi Howson Ltd. has identified 23 parcels within the Black Creek Corridor as potential sites for development or redevelopment. These parcels are shown in Exhibit 1 and are inventoried in Exhibit 3.

EXHIBIT 3

POSSIBLE DEVELOPMENT OPTIONS FOR LAND PARCELS IN THE BLACK CREEK CORRIDOR

Development Parcel	Current Use	Area (Square Metres)	Likely Availability for Development within 5 years	Possible Future Development Options							
				Open Space	Residential	Office (with ground floor retail)	Retail Plaza	Hotel	Mixed Use	Industrial Prestige	Industrial Other
A1	Coronation Park	68,000									
	1 No Soil Problem		Yes	Yes	Yes						
	2 Soil Problem		Yes			Yes	Yes		Yes		
A2	Public Recreation	21,000	Yes		Yes	Yes		Yes	Yes		
A3	Low/Medium Density Residential	9,300	No		Yes						
A4	Low/Medium Density Residential	25,100	No		Yes						
A5	Low/Medium Density Residential	6,500	No		Yes						
A6	Low/Medium Density Residential	6,000	No		Yes						
A7	School Recreational	21,000	Possible		Yes		Yes				
A8	Police Buildings	2,400	Possible		Yes		Yes				
A9	Retail Institutional Residential	8,100	No - Upgrade		*		Yes				
B1	Public Recreation	14,200	Yes		Yes	Yes		Yes	Yes		
B2	Open Space	8,500	Yes		Yes						
B3	Junk Yards	14,200	No	Yes							Yes
B4	Junk Yards	8,900	No	Yes							Yes
B5	Junk Yards	6,500	No	Yes							Yes
B6	Junk Yards	5,300	No	Yes							Yes
B7	Low/Medium Density Residential	3,200	No		Yes						
B8	Retail Residential	2,000	No - Upgrade		*		Yes				
B9	Retail Residential	2,000	No - Upgrade		*		Yes				
B10	Retail Residential	3,200	No - Upgrade		*		Yes				
C1	Building Contractor	42,500	Yes		Yes	Yes	Yes	Yes	Yes		
D1	Open Space Residential Industrial Plant	16,600	Yes			Yes					
D2	Industrial Office	15,400	Yes							Yes	
D3	Industrial Office	20,200	No							Yes	

Notes: * Parcel A9 includes some single family houses and parcels B8 to B10 include some units on the second floor of the strip retail uses.

Development parcels are shown on Exhibit 1.

Source: Development parcels identified by Macaulay Shiomi Howson Ltd
Site analysis by Clayton Research Associates.

For each development parcel, Exhibit 3 presents its current use, its area in square metres, its likely availability for development within a five year period, and a listing of its possible future development options.

The opinions regarding the availability of land parcels for development within the short term were based on their current use and on the physical and economic constraints relating to their development or redevelopment. Parcels A3 through A6, for instance, contain affordable, walk-up apartments, which were considered to be not politically feasible for redevelopment in the short term future.

The potential future development options for each parcel were derived based on the following criteria: the parcel's size; the current and adjacent uses; the visibility of the parcel to and from passing traffic; and the accessibility of the parcel.

The parcels surrounding the Black Creek Drive and Eglinton Avenue West intersection, for instance, have the least development constraints, and could be developed with residential, office commercial, retail and service commercial and hotel commercial uses, or a mixture of some of these uses (parcels A2, B1, C1 and D1 on Exhibits 1 and 3).

The market support for each of these future development options is reviewed in the following chapters. Each chapter determines the development potential of the Black Creek Corridor for a specific land use within the context of the expected interplay of supply and demand forces in the Toronto market area and then reviews the development potential of specific parcels within this generalized market review.

CHAPTER TWO

OFFICE SPACE POTENTIAL

This chapter reviews the potential for office space development in the Black Creek Corridor. The chapter is divided into five sections: the current City of York performance in the office space market; the expected future strength of the demand and supply of office space in the Toronto market area; the segments of the office market that might find the Black Creek Corridor attractive; the strengths and weaknesses of the Black Creek Corridor to accommodate these market segments; and an assessment of the office space potential of the Black Creek Corridor.

CITY OF YORK CURRENTLY HAS A LOW SHARE OF THE OFFICE MARKET

Due to its history, location and economy, the City of York has a miniscule share of the overall Toronto office market. With 6 percent of the Metropolitan Toronto population, York has only 1.5 percent of its office employment. All of York's office space is located in low-rise buildings.*

OFFICE MARKET IN THE TORONTO AREA EXPECTED TO REMAIN VERY COMPETITIVE

The office market in the Toronto market area is expected to remain competitive due to a steady demand and increasing supply of office space.

Steady Demand for Office Space

Total employment growth in the Toronto market area is expected to slacken in the years leading up to the end of the century, primarily due to lower population and economic growth, the general aging population and the stabilization of the female labour force participation rate.

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* An inventory of the office space in York's low-rise buildings is not available. The Metropolitan Toronto Planning Department surveys office employment annually, however.

However, the service sector of the economy, notably the amount of office employment, is expected to continue to increase in importance in the Toronto market area as the economy continues to shift away from the production of goods towards the provision of services.

EXHIBIT 4

PROJECTION OF THE AVERAGE ANNUAL DEMAND FOR OFFICE SPACE TORONTO MARKET AREA, 1986-2006

	Total Demand (thousands of	Demand Outside Central Area* square metres)
1981-1986	334	194
1986-1991	331	195
1991-1996	356	214
1996-2001	358	218
2001-2006	351	217

* The Toronto Central Area is defined as the area between Lake Ontario, the CPR tracks north of Bloor Street, Bathurst Street and the Don Valley.

Source: Royal Le Page (1981-1986) and Clayton Research Associates.

This expected increase in office employment will ensure a continued steadily growing office space demand in the Toronto market area as a whole. The slowdown in the growth of total employment is expected to be slightly balanced by an increase in the share of this employment that will be located in offices. This means that the total demand for office space is expected to increase over the next two decades at about the same rate as the first half of the 1980s. The amount of this office space expected to be built outside the Toronto central area is also expected to increase moderately.

Increasing Supply of Office Space

The future supply of office space, however, is expected to remain relatively plentiful as many municipalities promote their own office subcentres (served by public transit) or office parks (served primarily by private automobile). In addition, the development of the railway lands in the City of Toronto will bring considerably more well-located office space onto the market.

Thus, the supply of office space will continue to be plentiful for the following reasons: currently (in the fall of 1988) there is a relatively low vacancy rate in office space in the Toronto market area; with the future retail and industrial markets relatively constrained, developers will be directing more attention to office developments; and the strength and performance of the office market in the Toronto area is attracting the attention of new North American developers who are not currently represented in this market.

Consequently, while the demand for office space is expected to remain steady, the supply of office space is expected to increase significantly, particularly during the next five years. This means that the Toronto market area is likely to be characterized by considerable competition over much of the foreseeable future. The lesson for a developer in such a market is that any new office development must be well attuned to its prime market segments.

OFFICE MARKET SEGMENTS TARGETED FOR THE BLACK CREEK CORRIDOR

The Black Creek Corridor Could Attract Two of the Three Major Office Market Segments

Office tenants fall into three broad generic segments: those serving national and international markets; those serving regional and urban demands; and those oriented to local business and consumer needs. The characteristics of these three office market segments are shown in Exhibit 5 and are described briefly below:

- Office market segment: tenants with a national and international orientation

  These office tenants include the headquarters of large corporations, financial institutions, law firms and accounting firms. They commonly seek the face-to-face access to decision makers that a downtown location provides. These types of tenants have helped the Toronto central area capture approximately 40 percent of the total Toronto area new office market during the past decade.

- Office market segment: tenants with a regional and urban orientation

  These office tenants are small- to medium-sized firms and include sales offices, utility companies, insurance companies, market research firms, architects, advertising agencies, consultants and the "back office" functions of companies located in the Toronto central area (notably their data processing, accounting and personnel departments).

  Good accessibility to their market and easy commuting for their employees are the distinguishing characteristics of the locational requirements of this office market segment.

  In the Toronto market area, concentrations of these tenants fall into two distinct categories:

  - Office sub-centres: Office tenants who require easy access by public transit are frequently located in moderate to high density office sub-centres (such as the York Mills Road and Yonge Street intersection); and

  - Office parks: Office tenants who require easy access by automobile are frequently located in moderate density office parks (such as the Markham Road and Highway 401 area in Scarborough).

EXHIBIT 5

OFFICE MARKET SEGMENTS BY TYPICAL TENANTS AND CHARACTERISTICS

	Office Market Segments		
	COMPANIES SERVING NATIONAL AND INTERNATIONAL MARKETS	COMPANIES SERVING REGIONAL AND URBAN MARKETS	LOCAL BUSINESS AND PERSONAL SERVICE COMPANIES
TYPICAL TENANT			
Professional Services	Brokers Investment dealers Large law firms Large accounting firms	Architects Engineers (consulting) Surveyors Planners Accountants	Doctor Dentist Veterinarian Lawyer Accountant
Business Services	Producer oriented advertising agencies Media offices Production establishments	Advertising agency Consultants Data processing Market research	Employment agency Printing Typing
Financial Services	H.O.s of banks, trust companies, finance and insurance companies	Regional insurance Regional finance	Insurance district office Finance company district office Insurance broker Development finance
Other Services	Corporate H.O.s of manufacturing, distribution, mining, transportation and communications	Provincial manufacturing offices Sales offices Manufacturing representatives Provincial government offices Utility companies Regional government offices	Manufacturing offices Distribution companies Building contractors Sales offices
FUNCTIONAL CHARACTERISTICS OF TENANTS			
	Higher-order functions Higher-order decision makers Face-to-face contact Larger companies	Routine operations Intermediate decision makers Low face-to-face contact Small-medium sized Large clerical staffs Lower wage paying ability "Back-Office" operations: - Data processing - Accounting - Credit card operations - Mortgage departments - Regional offices - Personnel departments	Low order services Local services Residents frequently clients Small businesses

Source: Clayton Research Associates.

- Office market segment: tenants with a local orientation

  The office tenants that serve a very localized market, such as doctors and small accounting firms, seek locations close to the demand for their services and are frequently dispersed throughout the metropolitan area in low-rise office buildings.

It is anticipated that the Black Creek Corridor in the City of York will primarily attract tenants in the latter two groups, those tenants with a regional and urban orientation or a local orientation, rather than those with a national and international orientation.

Requirements of These Office Market Segments Revealed Through Case Studies

Overall locational requirements of the targeted market segments for the Black Creek Corridor (market segments with regional and urban orientation or local orientation) were determined by Clayton Research through surveys of office tenants. The requirements of these segments are critically compared to the opportunities presented in the Black Creek Corridor in a later section of this chapter.

The results of the tenant surveys are summarized in Exhibit 6 and the highlights of the surveys are noted below:

- Office market segment: tenants with a regional and urban orientation

  Surveys of the office tenants in North York and in a new office park in suburban Scarborough were undertaken with the following results:

  - The North York Office Market: A study cf the 1986 North York office market shows that nine out of every ten square feet of this City's office space is located within 1,500 metres of an expressway (Highway 400, 401 and 404).* This fact underlines the importance of easy access to both customers and to markets for most office tenants in the City of North York.

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* The estimates are from an inventory and map of office space in the City of North York from the North York Planning Department, dated 1986.

EXHIBIT 6

OFFICE MARKET SEGMENTS BY TENANT REQUIREMENTS
WITH A COMPARATIVE ASSESSMENT OF THE BLACK CREEK CORRIDOR

TENANT REQUIREMENTS	Office Market Segments: COMPANIES SERVING NATIONAL AND INTER NATIONAL MARKETS	COMPANIES SERVING REGIONAL AND URBAN MARKETS: OFFICE PARK	COMPANIES SERVING REGIONAL AND URBAN MARKETS: OFFICE SUB-CENTRE	LOCAL BUSINESS AND PERSONAL SERVICE COMPANIES	COMPARATIVE ASSESSMENT OF THE BLACK CREEK CORRIDOR
PROXIMITY TO:					
1. Expressway		Yes			Moderately good: 5 minutes to Highway 401
2. Business Clients	Yes	Yes	Yes		Moderate
3. Population Clients		Yes	Yes	Yes	Good (but City population is declining)
4. CBD/Decision Makers	Yes		Yes		Poor access downtown
5. Labour Pool via Public Transit	Yes		Yes		Moderate
6. Labour Pool via Auto		Yes		Yes	Good
7. Amenities and Services	Yes	Yes	Yes		Very poor at first
8. Government/Institutional	Yes				Poor access to downtown activities
9. Homes of Executives		Yes		Yes	Moderate: High grades homes not nearby
10. Homes of Clerical Workers		Yes	Yes	Yes	Good: Affordable housing nearby
11. Employee Support Services	Yes	Yes	Yes		Poor at first
12. Access to Airport	Yes	Sometimes			Moderate: 15 minutes to Pearson International
AVAILABILITY OF:					
1. Parking		Yes		Yes	Good if constructed underground
2. "Triple A" (Quality) Space	Yes	Yes	Yes		Good quality space assumed
3. Low Quality "C" Space	Yes			Yes	Poor (maybe available in industrial blocks)
4. Space for Expansion		Yes	Yes		Moderate
IMAGE:					
1. Prestige/Reputation	Yes	Yes	Yes		Poor at first
2. Visibility	Yes	Yes	Yes		Good visibility in all directions
3. Identity/Architectural Quality	Yes	Yes	Yes		Good design assumed
4. Quality Space	Yes	Yes	Yes		Good quality space assumed
5. Rent Sensitive				Yes	Poor with costly underground parking
6. Corporate Name on Building	Yes	Yes	Yes		Probably available
7. Momentum of Area	Yes	Yes	Yes		Very poor at first
BUILDING DENSITY:					
1. Density of Offices	High	Moderate	Moderate-High	Low	Moderate likely

Source: Clayton Research Associates, based on tenant surveys and literature review.

Most of the office tenants expected in the Black Creek Corridor would have a similar requirement for good accessibility by automobile. However, the Black Creek Corridor is not served by a throughway, but by a major arterial road which terminates immediately to the south of the Corridor lands. Thus the accessibility of the Black Creek Corridor is not as good as many of the competing office parks in neighbouring North York.

- New Office Park in Scarborough: The office park along Markham Road between Ellesmere Avenue and Milner Avenue was chosen for detailed study because it is, in a number of respects, in an analogous location to the Black Creek Corridor (that is, it is a new suburban office location with reasonably good access to Highway 401). Development at this office park commenced in the mid 1970s and it currently consists of five buildings with a gross floor area of approximately 67,000 square metres (720,000 square feet). The following survey results were drawn by Clayton Research from interviews with office tenants as well as with municipal officials:

EXHIBIT 7

REASONS GIVEN FOR LOCATING IN THE MARKHAM ROAD OFFICE PARK, SCARBOROUGH RESULTS OF A TENANT SURVEY, 1987

	Percent Responses		
	All Firms	Small Firms	Large Firms*
Accessibility to Highway 401	22	18	31
Central to Scarborough Market	22	24	19
Close to Homes of Senior Management	16	20	8
Close to Homes of Employees	12	12	12
Reasonable Rental Rates	9	8	12
Always Been a Scarborough Firm	8	10	4
Quality of Building	3	2	4
Other Reasons	8	6	10
Total	100	100	100

* A large firm was defined as occupying more than 250 square metres (approximately 2,750 square feet).

Source: Clayton Research Associates Survey, March, 1987.

- The establishment and growth of this office park was attributed by municipal planning officials to the vision and drive of one entrepreneur.
- The most frequent reasons quoted by tenants for choosing this office park were accessibility to Highway 401 and accessibility to the Scarborough market. Accessibility to Highway 401 was more important for the large firms than the smaller firms (see Exhibit 7).
- Next in importance in choosing this office space was its location close to the homes of senior management and employees.
- Reasonable rental rates and the quality of the building were less important; they figured as the fifth and seventh most frequently mentioned reasons for choosing this space.

EXHIBIT 8

TENANT MIX IN THE MARKHAM ROAD OFFICE PARK
SCARBOROUGH, 1987

Type of Tenant	Percent Occupied Space	Percent Total Space
Tenant Serving Regional and Urban Markets		
Utilities/Government	26	
Manufacturers' and Distributors' Agents	19	
Business Services*	11	
Tenants With a Local Orientation		
Financial/Legal/Medical	11	
Other Tenants**	11	
Insurance	9	
Non-Profit	9	
Banks, Finance Companies	4	
Occupied Space	100	55
Vacant Space		45
		100

* Includes employment agency, software consultant, business consultant, advertising agency, etc.

** Includes restaurants, film studio, publishing agency, weight loss clinic, travel agent, hair care and variety store.

Source: Clayton Research Associates.

- By area of space occupied, the tenant mix is oriented to tenants serving regional and urban markets, notably utility companies, manufacturers' and distributors' agents as well as business services (see Exhibit 8).

- Almost half the office space was vacant in March, 1987. Tenants attributed the overbuilding to the developer's expectation of the construction of a rapid transit line, which did not materialize.

Based on the survey results, the lesson of Scarborough's Markham Road office park for the development of the Black Creek Corridor is that unless the amount of office space is carefully targeted to the market demand, significant vacancies will occur. In comparison to the Scarborough location, the Black Creek Corridor is less accessible to an expressway and its accessibility to the local market is somewhat constrained by the local road network.

- Office market segment: tenants with a local orientation

Office tenants serving a localized area typically show a consistent ratio of persons, or establishments, per office tenant in their market area. For instance, in Ontario there is generally one doctor per 1,000 inhabitants and one accountant per 3,000 inhabitants. Locally-oriented tenants are generally a function of population (or business) density first, and income levels second.

While this tenant segment is important to the future office space in the Black Creek Corridor, the fact that the City of York Planning Department projects that the City population will decline in the future constrains the number and type of tenants that will want to serve the area around the Black Creek Corridor. The effects of an overall decline in York's population may be countered to some extent by new housing located in the Black Creek Corridor.

Black Creek Corridor Has Potential As An Office Park Relying on Auto Access

Because the Black Creek Corridor will lack access by rapid transit within the horizon of this study, the ultimate office development should be comparable to an office park format rather than an office sub-centre, that is, a moderate density of office buildings with extensive parking rather than a moderate to high density of office buildings with restricted parking served by good public transit. Based on examples of other office parks, a moderate office density would be up to 1.5 times the site area coverage.

THE ADVANTAGES OF THE BLACK CREEK CORRIDOR TEND TO OUTWEIGH ITS DISADVANTAGES AS A LOCATION FOR OFFICES

Exhibit 6 also compares the Black Creek Corridor with the tenant requirements for each of the identified market segments. In comparison to the tenant requirements in an office park, it is clear that the Black Creek Corridor has a number of advantages as well as a number of disadvantages. The balance of these characteristics is the subject of this section of the report.

Advantages

- The Corridor has a relatively central location within the City of York and reasonably good access to Metropolitan Toronto and the overall Toronto market area on two major arterials, one of which (Black Creek Drive) was constructed to almost expressway standards. Compared to many other arterials in the metropolitan area, Black Creek Drive is relatively uncongested at the present time.

- There is an increasing scarcity of good office park sites within Metropolitan Toronto. The intersection of Black Creek Drive and Eglinton Avenue West could function as a new, integrated office park. With an array of complementary services, such as a hotel, retail stores and restaurants, etc., the overall development could have a marketing edge over some of the other office parks in the more distant suburbs of the Toronto area.

- The overall office market is expected to continue to grow at a steady pace and, depending on their coverage, the parcels in the Corridor suitable for offices could satisfy up to a half year market demand of the entire Toronto market area.

- The City of York is currently "under-supplied" with office space, notably quality "Triple-A" office space. The Corridor could satisfy the locational characteristics that many regional, urban and localized office tenants are looking for, notably reasonably good (but not excellent) access and centrality to markets.

- With moderate density offices, the Corridor would have no direct competition from other existing or proposed developments within the City of York.

- Many of the office suites could have picturesque views of the Black Creek valley, which would aid their marketing and perhaps increase their lease rates somewhat.

Disadvantages

The Black Creek Corridor, however, is not a perfect location for the targeted tenant segments, as Exhibit 6 shows. It has a number of drawbacks as a location for moderate density offices:

- The City of York does not have a "track record" of quality office development. The initiation of a first-class office park and, notably, the attraction of quality anchor tenants, may prove to be the most difficult task in the development. It is not an easy matter to reverse the image nor the direction of long term trends in the economic base of an area. Initially, a tower with a single major tenant might be somewhat easier to attract than a multi-tenant development, as many smaller tenants need the "synergy", the services and the market that other office tenants provide.

- It does not appear that the City of York will receive a light rapid transit linkage within the next 15 to 20 years, so any future office development must be designed as a relatively compact, moderate density office park rather than a high density, office sub-centre type of development. Automobile parking requirements will, therefore, be greater (and will likely have to be underground) and may prove to be expensive, possibly making the lease rates somewhat uncompetitive with other, more suburban competing locations with surface parking.

  In addition, office parks are more dispersed in design than office sub-centres; however, the York development may have to be designed as an office park with the characteristics of a more compact office sub-centre (yet without the good public transit service that makes a typical office sub-centre successful).

- As the City of York Planning Department expects the City's population to gradually decline,* and its employment to only gradually increase, the City is not considered to be a very dynamic setting for office tenants, notably those providing services to local businesses and residents.

- The Black Creek Corridor sites will face stiff competition from lower-priced office space in rapidly growing outlying suburban areas.

- The adjacent industrial smoke-stack will tend to detract from the natural environment of the Black Creek valley and could reduce the rental values of office space facing the northwest (particularly if the offices are located near the stack).

- Private entrepreneurs are commonly wary of locations which are already characterized by government employment (in the Corridor, there are the City of York and Board of Education offices and the soon to be completed Metropolitan Toronto Police station).

Conclusions Regarding the Office Space Potential of the Black Creek Corridor

In relation to the supply and the demand foreseen in the Toronto market area, the nature of the tenants targeted for the Black Creek Corridor, and the strengths and weaknesses of this Corridor for office tenants, Clayton Research has come to the following conclusions regarding the office potential of the Black Creek Corridor:

- The Corridor is a suitable location for moderate density office development due to its reasonable accessibility to Highway 401 and to, at least, the western portion of Metropolitan Toronto.

- The encouragement and, notably, the initiation of office development in the Corridor will not be an easy task given the amount of office space coming onto the market in the Toronto area, the expected competitiveness of the market in general and, specifically, the general drawbacks of the Black Creek Corridor. These difficulties mean that the development of offices should not be seen as a short term venture but as a longer term development process.

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* The effect of new housing in the Black Creek Corridor was not considered in these projections. This housing would tend to arrest (but not stop) the population decline.

ESTIMATED OFFICE SPACE POTENTIAL OF THE BLACK CREEK CORRIDOR

The amount of office space that the Black Creek Corridor could support was determined first from the amount of space that could potentially be located on the available parcels, and second by relating this potential space to the demand for new non-central area office space for the Toronto market area (see Exhibit 4).

Office Space Potential Calculated from Site Coverage

The total office space potential for the Black Creek Corridor was calculated as a product of the available site areas and the acceptable site coverages, as follows:

- Site Areas: In Chapter One, five development parcels were identified as having potential for office space development (see Exhibit 3). Four of these parcels (comprising 9.4 hectares or 23.3 acres) surround the Black Creek Drive and Eglinton Avenue West intersection, and the other 6.8 hectares (16.8 acres) consist of Coronation Park (if the soil conditions were unsuitable for residential development or for continued use as open space).*

- Road Allowance: In the largest parcel, (Coronation Park), a road allowance of 15 percent was subtracted in the calculations. For the other four parcels, full site development was assumed.

- Office Building Density: In a comparable suburban office park, i.e., Markham Road in Scarborough, which was taken previously as an analogous office park, building densities of 100 percent of the lot area are standard. In suburban office sub-centres served by public transit, such as Yonge Street at York Mills Road, densities up to 165 percent of the lot area are permitted. For the purposes of this analysis, it was assumed that the smaller parcels, A2, B1 and D1 could be developed at 100 percent coverage; while the larger parcel C1 might be developed at more than 100 percent coverage because of its size, the office component would total 100 percent (the mixed use component on parcel C1 could raise the coverage to a higher level, perhaps 150

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* Contamination in the soil may restrict open space and residential uses in Coronation Park.

percent); and, because of its less advantageous accessibility, visibility, and consequently lower degree of attractiveness in the marketplace, the Coronation Park parcel was assumed to be developed at a lower coverage, 50 percent.

The results of these calculations are shown in Exhibit 9. The four parcels around the Black Creek Drive and Eglinton Avenue West intersection could accommodate approximately 94,000 square metres (one million square feet) of office space while the Coronation Park area, if available for office development, could accommodate another 29,000 square metres (310,000 square feet). Thus, a range of potential office space in the Black Creek Corridor of between 94,000 square metres and 123,000 square metres was estimated (one million to 1.3 million square feet).

EXHIBIT 9

CALCULATION OF POTENTIAL OFFICE SPACE IN THE BLACK CREEK CORRIDOR

Development Parcel	Size (Square Metres)	x	Road Allowance (Percent)	x	Office Building Coverage (Percent)	=	Potential Office Space (Square Metres)
Black Creek Drive/Eglinton Avenue West							
Parcel A2	21,000				100		21,000
Parcel B1	14,200				100		14,200
Parcel C1	42,500				100		42,500
Parcel D1	16,600				100		16,600
	94,300						94,300
Coronation Park (depending on Soil Conditions)							
Parcel A1	68,000		(15)		50		28,900
TOTAL OFFICE SPACE POTENTIAL							123,200

Source: Exhibit 3 and Clayton Research Associates.

Market Support for the Calculated Office Space

In Exhibit 4, the amount of office space that was expected in the Toronto market area outside the Toronto central area was shown to range from 195,000 square metres as an annual average in the 1986-1991 period to an annual average of 218,000 square metres in the 1996-2001 period (2.1 to 2.3 million square feet respectively).

The calculated office space capacity of the Black Creek Corridor of between 94,000 square metres and 123,000 square metres, therefore, represents approximately a half year of demand in the Toronto market area. Over a ten year period, therefore, the full office development of the Black Creek Corridor would represent approximately a 5 percent share of the total Toronto market or if its weaknesses delayed development over a 20 year period, a 2.5 percent share over a 20 year period.

The capture of a market share of between 2.5 percent (20 year development horizon) and 5 percent (a less likely 10 year development horizon) looks reasonable in relation to both the alternative locations of office space in the Toronto market area and to the development constraints of the Black Creek Corridor.

CHAPTER THREE

POTENTIAL FOR INDUSTRIAL REDEVELOPMENT

This chapter reviews the redevelopment potential for the parcels that are currently occupied by industrial uses in the Black Creek Corridor (no vacant parcels were identified in Chapter One as having a future industrial potential). The chapter is divided into five sections which focus on the following topics: the City of York's industrial structure; the balance of supply and demand for industrial land within the Toronto market area; an identification of potential industrial market segments for the Black Creek Corridor; a review of the advantages and the disadvantages for the Black Creek Corridor for these identified segments; and a conclusion concerning the redevelopment potential of the Black Creek Corridor's industrial land parcels.

THE CITY OF YORK IS CHARACTERIZED BY MATURE INDUSTRIES

According to a recent industrial study, the City of York is characterized by "aging infrastructure, mature industries and a lack of recognition regarding the opportunities for industrial development".*

In 1985, the City had approximately 10,700 people employed in manufacturing and warehousing. Approximately two-thirds of these jobs were in five industrial sectors including furniture, metal fabricating, chemical products, textiles/clothing, and paper/printing. Adjacent to the Black Creek Corridor is an industrial area which is anchored by two major employers, Kodak Canada Inc. (chemical products) and Dominion Bridge of Canada (metal fabricating) on Trethewey Drive. Both anchor activities occupy substantial areas of land in the adjacent "heavy industrial" park; both generate significant amounts of truck traffic, notably on Industry Street and Trethewey Drive.

The majority of the industrial infrastructure in the City (60 percent) is over 20 years old and, in the competitive industrial market, is losing its appeal to modern and custom-built structures in the suburban municipalities.

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* Cresap, McCormick and Paget/Barnard, City of York Industrial Review, December, 1986, page 1.

WEAKNESS EXPECTED IN THE INDUSTRIAL LAND MARKET IN THE TORONTO AREA

Demand for Industrial Land Expected to Decline

Employment growth, and notably growth in industrial employment, in the Toronto market area is expected to slacken in the years leading up to the end of the century as the economy turns towards the provision of services and away from the manufacture of goods.

EXHIBIT 10

PROJECTION OF THE AVERAGE ANNUAL DEMAND FOR INDUSTRIAL LAND, TORONTO MARKET AREA, 1986-2006

	Total Demand (hectares)
1981-1986	250
1986-1991	254
1991-1996	236
1996-2001	211
2001-2006	162

Source: Clayton Research Associates.

This decline in the rate of growth in industrial employment means that the average annual demand for 250 hectares (620 acres) of new industrial land experienced in the early 1980s in the Toronto market area is expected to decline to an annual average demand for some 160 hectares (400 acres) in the 2001-2006 period. This drop in demand will occur even though a more diverse range of activities are currently locating on industrially-designated land.

Massive Oversupply of Industrial Land Will Persist

In 1986, approximately 15,000 hectares (37,000 acres) of industrial land were occupied in the Toronto area and another 10,000 hectares (25,000 acres) were vacant, zoned and designated in Official Plans of the constituent municipalities for industrial use. Clearly, all this vacant, zoned and designated land will not be occupied for many decades in the future.

Of the 10,000 hectares of vacant industrial land, less than 20 hectares are available in the City of York. Given this, and the fact that vacant industrial land is relatively scarce in the inner Toronto metropolitan area, there is a strong possibility that industrial lands in the City of York could serve a distinct niche, or segment, of the industrial market if its development is properly targeted.

THREE INDUSTRIAL MARKET SEGMENTS POSSIBLE FOR THE BLACK CREEK CORRIDOR

There are three segments of the industrial land market for which the Black Creek Corridor might be suitable: prestige industrial uses; mixed industrial-commercial uses; and heavy industrial uses. These market segments are reviewed briefly below:

- Industrial market segment: prestige industrial uses

  In municipalities where the economic, locational and planning prerequisites exist, as in Mississauga and Markham, the prestige industrial segment of the industrial land market has comprised approximately 30 percent of total industrial land demand in recent years. This market segment is expected to increase in share of industrial development as future trends in the economy promote more service-related activities.

  Detailed surveys of six prestige industrial parks in the Toronto market area by Clayton Research show that a prestige industrial park is characterized by the following qualities: a limited number of developers who maintain a quality development; an industrial park anchored by national or international corporations, high-tech offices and head offices of corporations; "clean industries"; visibility from an expressway so that the industrial buildings can be "showcased" for maximum effect; distinctive architecture and notable landscaping; medium-sized lots (never less than one acre in size); upscale hotels providing service to the park; and a high office component in the industrial park.

  Prestige industry is a market segment that the City of York would like to encourage in the Black Creek Corridor.

- Industrial market segment: mixed industrial-commercial uses

  A segment of the industrial land market that has been very successful in recent years has been the light industrial areas where manufacturing, warehousing, offices and retailing (including warehouse retailing) can co-exist.

  There are two requirements for a successful mixed industrial-commercial area: an accessible and visible location; and frequently the existence of older industrial buildings which may be adapted for various industrial or commercial purposes. Prime examples of vibrant, mixed industrial-commercial parks are the Mavis Road area of Mississauga (near the Mississauga City Centre), the Chesswood/Toro area of North York (just north of Downsview Airport) and Doncaster Avenue in Markham.

The eastern and northern edges of the industrial area flanking the Black Creek Corridor (Industry Street Link and Trethewey Drive) are currently used relatively successfully for this type of mixture of industrial, warehousing, office and retail uses.

- Industrial market segment: heavy/unsightly industrial uses

As most municipalities prefer "clean" industries, the amount of land designated in the Toronto market area specifically for unsightly industries, which may create noise, or have extensive requirements for outside storage, is quite limited. Consequently, there is a significant demand for this market segment in municipalities (like Mississauga) which have specifically designated land for this market segment. Land for heavy industry has been picked up rapidly where it is available because supply is restrained while demand is not restrained.

PORTIONS OF THE BLACK CREEK CORRIDOR ARE SUITABLE FOR INDUSTRIAL USE

Black Creek Corridor Meets Key Locational Criteria of Industries

Surveys by Clayton Research in industrial parks and a review of relevant literature show that industrial activities rate the following characteristics in their choice of locations:

- Proximity to a good highway (generally the highest rating);
- Availability of suitable land;
- Availability of suitable labour;
- Scope for expansion on the site;
- Proximity to markets;
- Availability of rail service;
- Availability of raw materials;
- Favourable government policies and tax structure;
- Proximity to existing and, especially, related industry;

- Availability of municipal services; and
- Community assets and desirability (generally the lowest rating).

In relation to these characteristics, the Black Creek Corridor has proximity to a good highway, little suitably vacant land (but industrial land that could be redeveloped), and available skilled labour (notably in furniture, metal fabricating, automotive parts, textiles, woodworking and bedding manufacture). The Black Creek Corridor is also central to the Toronto area market. Thus, the Corridor has many of the key ingredients for a successful industrial area.

The existing industrial land within the Black Creek Corridor study area may be divided into two distinct groupings: the northern parcels that have visibility from Black Creek Drive (parcels D2 and D3) and the southern parcels at Hyde Avenue and Valley Crescent that have no visibility from any arterial (parcels B3 through B6). The suitability of these groupings for the industrial market segments targeted for the Black Creek Corridor are discussed below.

Disadvantages of the Two Northern Parcels Outweigh Their Advantages for Prestige Industrial Redevelopment

Parcels D2 and D3 are relatively flat sites with older, low-rise, multi-tenant industrial buildings. One of the tenants, for instance, is the York Business Opportunity Centre which serves as a business incubator by renting space and office services.

Both parcels are visible from Black Creek Drive and thus have some potential for either prestige industrial uses or mixed industrial-commercial uses. The disadvantages of the parcels tend to outweigh their advantages for prestige industrial uses, however. The analysis of their strengths and weaknesses for prestige industries is as follows:

Disadvantages for Prestige Industrial Uses

- Proximity to a good highway: Black Creek Drive was not constructed to expressway standards.

  The visibility of both properties (a crucial factor for prestige industries) to south-bound traffic will be partially blocked by the construction of the Metropolitan Toronto Police station on the east side of Industry Street Link.

The amount of truck traffic on Industry Street and Industry Street Link would significantly detract from a prestige image of any development.

- Availability of suitable land: While located close to an international corporation, Kodak Canada Inc., the aesthetics of the industrial area immediately to the west considerably detract from the potential "showcase" location of the sites (although they have relatively good visibility from Black Creek Drive).

  There is a notable oversupply of vacant industrial land in the Toronto area, of which a significant amount is designated for prestige industrial use. Both parcels could face considerable competition from more appropriately located prestige industrial parks in suburban communities.

- Availability of suitable labour: The labour force in York is primarily blue-collar rather than specialized in skilled trades, which is the hallmark of a prestige industrial area.

- Scope for expansion on site: Both parcels D2 and D3 are too small to develop the momentum required for a genuine prestige industrial development and are too small to allow any major industry room for expansion.

- Proximity to related industry: With the exception of the Kodak Canada plant, which is not particularly attractive, many of the industrial developments in the vicinity do not have especially strong linkages for high-tech activities.

  It would be difficult to divorce the redevelopment of parcels D2 and D3 from the aesthetics and the uses immediately adjacent to the northwest (which include warehouse retailing of clothing, woodworking, packaging, metal fabricating, "heavy industry", etc., which are not "prestigious" activities).

- Community assets and desirability: In the recent past, the City of York has not had a tradition of dynamic, modern industrial development.

Advantages for Prestige Industrial Uses

- Proximity to a good highway: Although Black Creek Drive has not been constructed to expressway standards, it does provide good access from the industrial parcels to the expressway network of Southern Ontario. Good highway access is a prime requirement for prestige activities.

- Proximity to future office activities: The development of an office park at the intersection of Black Creek Drive and Eglinton Avenue West should greatly enhance the potential of the entire area to showcase industrial activities.

Balance of Advantages and Disadvantages

The above analysis leads to the following conclusions concerning the suitability of parcels D2 and D3 for prestige industrial uses: neither parcel D2 nor D3 has a significant potential for prime prestige industrial use, even if the adjacent sites are redeveloped with moderate density offices. The construction of office buildings around the Black Creek Drive and Eglinton Avenue West intersection, however, could spur redevelopment on these two properties. It is unlikely, however, that a prime "prestige" industrial activity would redevelop either site as there are many other potential "showcase" sites in the Toronto area which have better visibility to more traffic and are located within a planned, park-like setting.

Any modern building, or even a complete building renovation, would be "prestige" in the context of York's current industrial inventory. However, the industrial activity would probably not be "prestigious" in the normal sense of the term. As long as the parking requirements were met, modern, multi-tenant buildings on both properties would be a notable addition to York's industrial structure and would continue the type of uses currently in this area (i.e., printing, sales and service, retail and office commercial uses).

However, if moderate density office development at the Black Creek Drive and Eglinton Avenue West intersection were successful, both parcels could have some potential for low density office redevelopment in the longer term.

Disadvantages of Redeveloping the Southern Parcels Outweigh Any Advantages for Different Industrial Uses

Parcels B3 and B4 are on low-lying land that is below the floodplain limits of the MTRCA and is in theory, and possibly in practice, unusable for redevelopment. Parcels B5 and B6 are adjacent, mostly above the floodplain limits, but they have steep slopes.

Disadvantages of Redevelopment for Industrial Use

- These parcels are used for junk yards, building contractors yards and auto repair. These current uses are not readily compatible with other industrial and commercial activities (nor with residential activities). There is no new activity that could start a process of industrial regeneration here (for instance, the buildings are too small and dilapidated to be easily renovated for small offices which might displace the other activities). For redevelopment to occur, total demolition of the buildings and removal of their metal contaminated soil would be essential prerequisites.*

- These parcels are under many different ownerships, which hinders land assembly for redevelopment.

- Most of the area is under the flood limits of MTRCA, which limits the redevelopment potential of all parcels (notably the flatter parcels, B3 and B4). Even if the flood problem were eliminated at a cost, future residential redevelopment here would be limited by the proximity of the elevated rail lines. Trains carrying toxic substances would represent a danger to future inhabitants if there were a derailment. The noise of the trains would also be a problem for residential development.

- Neither Hyde Avenue nor Valley Crescent, which serve the area, has any visibility to passing traffic. Both roads are isolated from the residential areas to the northeast by the steep sides of the Black Creek Valley.

- With restrictions on outside storage elsewhere in the municipality, there is a demand for land for outside storage based on the types of uses currently found in the Hyde Avenue and Valley Crescent area. Thus, there is a strong case for leaving the area above as is, as its isolated location will not detrimentally affect the development of other parcels in the Black Creek Corridor.

Benefits of Not Redeveloping the Area for Industrial Use

- Parcels B3 through B6 are suited for the types of uses that are currently located there. These uses are compatible with the industrial and commercial uses located immediately to the south and southwest and they are physically isolated from the residential uses to the north and northeast.

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* The soil in this area is apparently contaminated with metals due to the long term operation of the junk yards here.

- There is a demand for the types of uses that currently exist on these parcels of land. Given the constraints on redeveloping the parcels, the current uses may represent the "highest and best" uses for the properties at the present time and for the foreseeable future.

Balance of Advantages and Disadvantages

The above analysis suggests that there is a strong argument for leaving parcels B3 through B6 alone in the short term future, mainly because they perform a market role, and no alternative development appears feasible due to the constraints of the area.

If the area were cleared of the existing uses and if the contaminated soils were removed and flooding problems overcome, there is a possibility that the area could be used for parkland or perhaps social housing. The expansion of parkland into this portion of the Black Creek valley could theoretically substitute for better located parkland and recreation facilities elsewhere in the Corridor, which could then be used for commercial purposes.

CONCLUSIONS REGARDING THE INDUSTRIAL REDEVELOPMENT POTENTIAL OF THE BLACK CREEK CORRIDOR

The following conclusions are based on the above analysis.

Parcels D2 and D3

These parcels are not entirely suitable for prestigious industrial activities. They could be used in the medium term for mixed industrial-commercial activities somewhat similar to the tenants which currently occupy their buildings. It is doubtful that these types of activities would be willing to pay rents sufficient to cover the costs of a total redevelopment of their structures. In the longer term, with moderate density office buildings concentrated around the Black Creek Drive and Eglinton Avenue West intersection, these properties might have the potential for redevelopment as low density office structures.

Parcels B3 through B6

The market analysis did not identify any clear alternative industrial use for these lands. The continuation in this location of the current uses, which rely on extensive areas of outside storage, would not be expected to jeopardise the commercial, industrial and residential development of other parcels in the Black Creek Corridor because these parcels are relatively isolated.

If the lands were assembled, and if the metal contaminated soil was removed, a feasible re-use of the parcels could be as parkland as well as possibly social housing. Parkland in this location could substitute for the development of more accessible and less constrained parcels within the Black Creek Corridor.

Once new development is firmly established in the Black Creek Corridor, parcels B3 through B6 may in the long term become candidates for commercial and industrial redevelopment, if their major constraints were ameliorated.

CHAPTER FOUR

MEDIUM AND HIGH-RISE RESIDENTIAL DEVELOPMENT POTENTIAL

There are two tenure options for medium and high-rise residential development in the Black Creek Corridor - rental or condominium. Rental housing could be either private sector housing or social (subsidized) housing. Within the condominium sector, there could be opportunities for moderate, middle or luxury accommodation. The analysis here is restricted to private sector housing opportunities; market studies for subsidized housing are not required since there is unquestionably a large unsatisfied demand for this type of housing.

The nature of the residential development opportunities on the Black Creek Corridor lands are dependent upon a number of factors. These include the magnitude of the potential demand, the number of competitive projects, the physical and locational attributes of the lands under consideration and the nature of (and interrelationships with) other uses on the lands. These factors are all considered in the analysis which follows.

MARKET PROSPECTS IN THE TORONTO MARKET AREA

The Recent Past and Current Conditions

Until recently, the apartment market in the Toronto area had been characterized by a paucity of new production. The average number of apartment starts per year in the Toronto market area over the 1981-1986 period was only 7,171 units. This figure includes both rental (private sector and social) and condominium units. For much of this period, the condominium market was characterized by a surplus of new product, therefore, it is understandable that condominium starts were depressed. However, this was not the case for the rental market where rental apartment vacancy rates were one percent or less during the entire period. High interest rates for most of the period and the existence of, and uncertainty about, rent controls were the primary reasons behind the low number of rental starts.

Over the last two years, demand pressures have intensified in the Toronto area housing market. Rental vacancy rates are nearly zero and both house and condominium prices exploded between early 1985 and early 1987. These demand pressures resulted from strong economic growth in the Toronto market area, which enhanced consumer confidence and led to a large influx of people to the Toronto area from other provinces and other parts of Ontario as well.

The demand for new condominiums further intensified in the latter half of 1986 when a total of 9,267 units were sold. Another 3,073 units were sold in the first three months of 1987. These sales were, in most cases, made prior to the start of construction. As a consequence, condominium apartment construction increased sharply in the first half of 1987 to 6,980 units started, almost three times the number started during the first half of 1986. The buyers of these new condominiums have not all been households intending to live in the units upon completion, however. While exact figures are not available, perhaps as many as half were purchased by speculators/investors. These buyers intend to rent out the units for a period of time prior to reselling them. Since April of this year, the demand for both single-family homes and condominiums has dropped in response to excessively high prices. Until prices return to a level more in balance with average incomes, which could take a year or more, the level of sales of new condominiums will likely remain comparatively low.

The recent surge in condominium demand and construction has two implications for future condominium development. A surplus of units is quite possible in 1988-1989 (when all units currently under construction are completed) and this surplus could last for a year or more. Hence, in the medium term, perhaps up to 1990, the condominium market is likely to be quite competitive. Secondly, the explosion in demand by owner-occupants shows that a small but a significant and growing segment of the population desire a condominium living environment. This is clearly positive for condominium developers.

Private sector rental apartment starts, i.e., buildings in which all units are intended for rental occupancy, have yet to experience any resurgence.

Future Prospects

The overall demand for new housing in the Toronto area is expected to decline sharply in the 1990s and beyond. The aging of the baby boom generation out of the traditional household-forming age groups (i.e., the early 20s) virtually assures a declining overall demand. The demand for conventional single-family homes in particular will decline as the baby boom generation begins to age beyond the traditional homebuying age groups (the mid 20s to the mid 40s).

The outlook for new apartment accommodation, particularly condominiums, is much more encouraging. High-rise condominium living has particular appeal to households aged 50 years or more which no longer have children at home. Data from the 1986 Census of Canada show that 60 percent of all high-rise condominium apartment owners in the Toronto area were aged 50 years or more (somewhat more than half of these were aged 50-64 years). Another primary target group for condominiums are working couples without children at home.

High-rise condominium apartments appeal to specific segments of the population because of the lifestyles they offer. A growing number of households are attracted by the ability to escape responsibility for ongoing maintenance and repairs to the exterior of their dwelling and their yard and the availability of recreational amenities. In addition, the ability to live with their peers and, for seniors in particular, the more secure environment (for both themselves and their possessions) are very appealing. As the baby boom generation ages and the appeal of lifestyle living grows, the demand for new condominiums should continue to be quite strong through the 1990s and beyond.

Given that much of the future demand for condominiums will be from households who have substantial equity in their present home, demand is expected to be concentrated in the middle and luxury segments of the market.

The outlook for new private sector rental accommodation is more limited. Much of the requirement for additional rental housing will be from low and modest income households which the private sector cannot readily serve without government subsidies. Developers of more luxury rental projects are likely to face considerable competition from condominium apartments since a significant proportion of these units (perhaps up to one-quarter of the stock) will likely be available for rental occupancy.

Rent controls are also a factor in the future volume of rental construction. However, new rules governing the rent review process have now been established. Investors in post 1975 buildings are permitted to charge a rent which generates approximately a 10 percent return on their equity and with the certainty of the new rent review regime, some increase in private rental construction is likely in the short term; rental investment will continue to be constrained due to the underlying fear that government could change the guidelines at some time in the future unless government subsidies are available to entice developers to build new buildings.

MARKET PROSPECTS IN THE CITY OF YORK

The Recent Past and Current Conditions

The City of York has experienced very little new apartment construction over the past several years. Between 1981 and mid 1987, only 1,447 apartment starts were recorded, an average of just 223 units per year. CMHC data indicate that most recent City of York apartment starts have been in social housing projects.

Only one condominium project has been built - a 170 unit apartment project at the southwest corner of Eglinton Avenue West and Guestville Avenue which was developed by Ronto Development Corporation.

This project, which was initially designed as a rental project, was targeted at the moderate segment of the market. The project was marketed in early 1986 with about 40 percent of the units sold to investor/speculators. A sizeable proportion of the remaining units were sold to young couples who previously lived in the City of York.

No large-scale private rental projects were started in the City of York over the 1981 to mid 1987 period.

There is one apartment project under construction in the City at the present time. Construction has recently commenced on a total of 330 apartments on a three acre site fronting on Eglinton Avenue West between Keele Street and Caledonia Road. These units are in two structures - a 210 unit social housing building and a 120 unit modestly-priced condominium structure.

A limited number of applications to develop residential apartments are in the planning process. An application has been received to construct 150 condominium apartments on a 6,000 square metre property overlooking the Humber River just south of Dundas Street (the existing Lambton Tavern site). Between 270 and 300 apartments could be built on a City-owned one hectare site along the Humber River south of Lawrence Avenue West (the Hickory Tree Road site). The City is holding a design competition for this site. A total of 160 senior apartment units have been proposed as part of a major redevelopment scheme on six hectares at 601-605 Rogers Road (however, the City of York Planning and Economic Development Department is not in favour of the overall scheme). A proposal for a major residential development containing 2,700 units on a 15 hectare site located just north of the Weston Road/Jane Street intersection has recently been withdrawn by the new owners of the property. There is a possibility that a residential component could still form part of the development plans for this site.

Thus, with a few exceptions, the City of York has not experienced the upsurge in condominium starts and applications that has occurred in a number of other municipalities throughout the Toronto area.

Future Prospects

The City of York possesses an advantage for apartment development which will grow in importance in the coming years - its location. As the Toronto area continues to expand, areas such as the parts of York which are in relatively close proximity to the downtown area, and yet are convenient to other parts of the Toronto area, will be perceived as good locations for new apartments. The construction of Black Creek Drive has added this latter locational perspective to a significant portion of the City of York.

The low level of condominium apartment activity in the City of York in the past is undoubtedly partly related to the socio-econo-

mic mix of the City's population. The City has a lower incidence of middle and high income families than the overall Toronto area. As an illustration, the income of the average City of York family in 1981 was 20 percent below the average for the Toronto area. Homeowners are also less affluent in York, with the average 1981 ownership housing unit having a value 22 percent below the Toronto area average. Experience has shown that more moderate-income homeowners are less likely to opt for condominium living than more affluent howeowners.

The sales success of the Ronto condominium project, even allowing that it was marketed during a housing boom, indicates there is a market for condominiums in the City of York. It is likely, however, that future demand will be very site-oriented. The availability of desirable sites (e.g., sites large enough to contain virtually self-contained neighbourhoods in areas adjacent to parks or ravines and community amenities such as shopping) with reasonably good access will, to a considerable degree, determine the number of condominiums which will be built in the City in the future. Much of the demand, though by no means all, will likely come from households currently not living in the City. Prices and, hence, the market segment served by these units will tend to be somewhat lower than in many other parts of the Toronto area.

MARKET PROSPECTS FOR THE BLACK CREEK CORRIDOR LANDS

An Overview

The Black Creek Corridor lands have a number of inherent advantages (as well as some disadvantages) as a location for private sector apartment development, particularly for condominiums which are expected to be the largest component of this development activity over the coming decade or two. It is important to note that the extent to which private sector apartment development can be attracted to the Corridor lands, and its intended market segment, will be very much influenced by the prospects for, and the characteristics of, the overall Corridor lands themselves. The market potential of the lands will vary to the degree specific sites are developed individually or as part of an integrated and comprehensive master plan.

The Black Creek Corridor lands have two distinct advantages for private sector apartment development:

- The Black Creek Corridor has relatively good access to Highway 401 and the employment centres in North York, Etobicoke and Malton.

  Employment centres in the northwest part of the Toronto area can be easily reached from the Corridor lands via Black Creek Drive.

- There is a plentiful supply of attractive parkland within the Corridor and a number of potential sites have good views of the park and valley lands.

  The availability of pleasing vistas and access to a visually appealing open space system have considerable appeal to condominium purchasers and higher income renters. The number of potential competitive sites with these attributes is limited, which provides the Black Creek Corridor lands with a marketing advantage.

A future advantage for the Corridor lands would arise from the construction of a proposed rapid transit service along Eglinton Avenue West or the proposed expansion of the Georgetown Go Rail service and the construction of a GO station at its intersection with Eglinton Avenue West just west of the Corridor lands. However, affirmative decisions have not been made regarding either of these facilities.

As previously noted, the Black Creek Corridor lands also have some disadvantages for private sector apartment development:

- The existence of the Kodak Canada Inc. facilities is a negative factor.

  The Kodak facilities are physically imposing and very visible from all parts of the Corridor. In addition, there are smoke emissions from the facilities. With most of the Corridor lands being east or southeast of the Kodak site, and downwind of it, these factors would have some negative impact on residential development.

- The lands do not have very good access to downtown Toronto.

  While Black Creek Drive provides good access to the north, its terminus at Weston Road means that a trip downtown tends to be inconvenient and time-consuming, despite its physical closeness to the downtown.

- The character of much of the development surrounding the Corridor lands is not high quality.

  The Corridor lands are surrounded on three sides by industrial uses and rather modest housing. Partially offsetting this is the fact that the Corridor is in the heart of a built up area with an established community infrastructure.

The actual number of apartment units which could be marketed on the Black Creek Corridor lands will be a function of the attributes of specific sites and the nature of the overall development scheme for the lands. These factors are discussed below.

Appropriateness of Particular Parcels For Private Sector Apartment Development

Parcel A1

This 6.8 hectare (16.8 acres) parcel currently comprises Coronation Park. It is a very attractive land parcel which borders the Black Creek. A variety of housing types including high-rise apartments, medium-rise apartments and possibly some townhouses, could be accommodated on this site in a very appealing fashion. A buffer would have to be created along the north and northeast sides of the site to create a separation from the older existing walk-up apartment projects (assuming these adjacent uses remain). The high-rise apartments would best be located on the western and southern portions of the property. At least 1,000 housing units could readily be accommodated on parcel A1.

Parcel A3

The redevelopment potential of parcel A3 for housing is more limited given its lower elevation. In fact, it would be preferable to convert this site to open space which would enhance the attraction of A4 (assuming Coronation Park is not developed). Hence, no allowance for housing is made on this parcel.

Parcels A4 to A6

These parcels contain a total of 3.8 hectares (9.5 acres) of land. At the present time, they accommodate a number of walk-up apartment and sixplex structures. The exteriors of the buildings are quite run down and the area appears ripe for redevelopment. Redevelopment of these sites is severely constrained by Bill 11. Future redevelopment prospects will depend on the nature of replacement legislation for Bill 11.

If redevelopment were undertaken, the potential of the parcels would depend to a significant extent on whether Coronation Park (site A1) is developed for housing or for commercial use. If Coronation Park remains as parkland, parcels A5 and A6 in particular and most of parcel A4 would be very suitable for high-rise apartment development, at a density of perhaps 175 units per hectare (approximately 70 units per acre), for a total of 665 units. Conversely, if the Coronation Park lands are redeveloped, the development potential for these lands, because of the reduced exposure to open space, would be reduced to perhaps 125 units per hectare (50 units per acre) or 475 units in total.

Parcels A7 and A8

From the standpoint of apartment development potential, these parcels should be considered together. They contain a total of 2.4 hectares (6.0 acres). The ultimate development potential for residential use of these parcels again depends upon whether Coronation Park remains as parkland or is developed for residential or commercial use. If the park remains, the sites could accommodate approximately 475 units. Conversely, if the parklands are developed, the potential of these parcels would likely be closer to 350 units.

Parcels A2, B1 and C1

These three parcels contain a total of 7.8 hectares (19.2 acres) and all have potential for development with residential apartments, but the highest and best use of these sites as a group would be their development for office space. Residential development could be concentrated on one parcel, perhaps A2 or B1, or could be included on two parcels, perhaps B1 and C1. If it is assumed that 20-25 percent of the area is developed for residential apartments, approximately 400 units could be accommodated.

Parcel B7

This 3,200 square metre (0.8 acre) parcel currently contains two older walk-up apartment buildings. Assuming these structures could be demolished, the potential of the site would be for a comparably sized new development at most. The parcel's development potential is limited by its small size and its limited exposure to the park to the west. Since the parcel offers little prospect for redevelopment at a significantly higher density, no provision for new housing is made for this parcel.

Parcel B2

This elongated 8,500 square metre (2.1 acre) parcel has excellent visual exposure to Keelesdale Park and from this perspective, would provide an attractive living environment. A large disadvantage is its frontage along Black Creek Drive.

The parcel could accommodate a lower-rise terraced apartment project terraced to face the park with an easterly focus. Perhaps 85 apartment units could be accommodated on this site.

Parcels D1 to D3

These sites are not considered appropriate for apartment development. They are adjacent to industrial uses and would be isolated from existing residential development and community infrastructure.

Parcels B8 to B10 and A9

These sites are currently almost all in retail use and it is concluded in the retail analysis that the buildings could be usefully upgraded in the medium term through means of a Business Improvement Area.

Parcels B3 - B6

These parcels are generally low lying and physically separate from existing residential neighbourhoods. They are also in close proximity to an elevated busy rail line. Even with total clearance of the existing industrial uses and remedial action to deal with potential contaminated soil and flooding problems, the area is likely to hold little appeal for private sector development. Under these circumstances, there is the possibility of redevelopment of the parcels for various forms of social housing.

Total Apartment Development Potential

The number of units which could ultimately be built on the Black Creek Corridor lands depends on two important factors: the ultimate use of the Coronation Park lands and whether the existing apartments on parcels A4, A5 and A6 can at some time in the next 15 years be demolished.

Together, the various parcels are considered to be capable of accommodating between 1,600 and 2,300 new housing units, depending upon whether Coronation Park is retained as a park or is developed for residential or commercial use. This housing would almost all be apartments. This range would appear to be a feasible ultimate target over a 15 year time frame, representing an average production of about 105 to 155 units per year.

EXHIBIT 11

ESTIMATED APARTMENT DEVELOPMENT POTENTIAL BY SITE
BLACK CREEK CORRIDOR LANDS

Parcel(s)	Hectares*	Assuming Coronation Park Remains as Parkland	Assuming Coronation Park is Redeveloped for Residential Use
		Units	
A1	6.8 (16.8)	0	1,000
A3	0.9 (2.3)	0	0
A4 to A6	3.8 (9.5)	665	475
A7 and A8	2.4 (6.0)	475	350
A2, B1 and C1	7.8 (19.2)	400	400
B2	0.8 (2.1)	85	85
B7	0.3 (0.8)	0	0
B8 to B10 and A9	1.5 (3.8)	0	0
D1 to D3	5.2 (12.9)	0	0
Total		1,625	2,310

* Figures in brackets are acres.

Source: Clayton Research Associates.

An implicit assumption in the analysis of residential potential is that the Black Creek Corridor lands will be developed in a comprehensive manner which generates a vibrant central area for the City of York.

CHAPTER FIVE

RETAIL AND SERVICE COMMERCIAL POTENTIAL

This chapter briefly reviews the retail and service commercial potential of the Black Creek Corridor. The terms of reference of the study directed that emphasis be placed on the development and redevelopment potential of the Corridor for office commercial, industrial and residential uses rather than for new retail and service commercial uses.

Consequently, the analysis of market opportunities for new retailing and service commercial facilities was limited to those targeted at servicing the population living and working on the redeveloped Black Creek Corridor lands and the redevelopment of existing retail sites.

However, during the course of the market investigation, it became evident that a more sizeable innovative retail-type development on the Coronation Park parcel could be an important ingredient for the successful creation of a Corporate/Civic/Recreational Centre which would serve as a focal point for the City of York. This option is described in the text but a full-fledged market analysis was beyond the terms of reference of this report.

NINE PARCELS IDENTIFIED WITH RETAIL AND SERVICE COMMERCIAL POTENTIAL

Nine parcels in Chapter One were identified as having some future potential for retail and personal service uses. These parcels, grouped into three categories, are discussed below. The categories relate to the existing retail and service commercial strip along Eglinton Avenue West (parcels A9 and B8 through B10); the retail and service commercial uses that could be part of office structures on parcels A2, B1, C1 and D1; and the potential for a distinctive type of retailing associated with a civic square on parcel A1, Coronation Park.

Parcels A9 and B8 through B10

Parcel A9 contains residential units fronting Keele Street, retail and service commercial uses fronting Eglinton Avenue West and an institutional use (ambulance station) at the intersection of Eglinton Avenue West and Trethewey Drive. The retailing here is anchored by a small supermarket which provides its own parking adjacent to the store.

The other three parcels, B8 through B10, consist of two storey structures with ground floor retail and service commercial uses, and apartments on the second floor.

EXHIBIT 12

INVENTORY OF STORES AND SERVICES IN PARCELS A9 AND B8 THROUGH B10, 1987

	Number
Non-Local Orientation	
Antique Store	1
Political Office	1
	2
Local Orientation	
Stores:	
Discount Variety	7
Convenience Food	5
Small Supermarket (7,000 square feet)	1
Family Clothing	1
Flowers	1
Services:	
Beauty Salon	4
Bank	2
Restaurant	2
Fast-food	1
Tavern	1
Real Estate	1
Doctor	1
Dentist	1
Lawyer	1
Accountant	1
Photographer	1
	31

Source: Clayton Research Associates, July 1987.

The vast majority of the retail and service commercial uses in these four parcels are of a convenience nature, serving the day-to-day requirements of the local neighbourhood. Only two uses, a political office and an antique store, have an orientation that is not purely local. The only other use that provides its own parking is a bank on parcel B9.

The redevelopment potential of parcels B8 to B10 is severely constrained by their shallow lots facing Eglinton Avenue West. There is no room to redevelop and to provide free parking for the customers of the new stores and services. Unless a substantial amount of free parking is provided for these activities, it is unlikely that they will serve anything larger than their current local, walk-in trade.

Parcel A9 is large enough to redevelop as a retail plaza with free parking; however, the relatively small size of the parcel (8,100 square metres or 2 acres) means that a retail redevelopment here would still be dominated by local convenience uses. The only difference a retail redevelopment would occasion would be the introduction of chain convenience stores into a retail mix that is currently served by independent merchants.

Consequently, the redevelopment potential of parcels A9 and B8 through B10 is constrained by site size and by the fact that any redevelopment would inevitably change the character (but not the services) of the area, from almost exclusively independent merchants to predominantly modern chain stores. Such a trade-off does not appear to be warranted.

The effective municipal policy for these four retail parcels would be the encouragement of a Business Improvement Area whose organization and internal taxation methods would facilitate the upgrading of storefronts, streetscape and merchant services.

Ancillary Retail on Parcels A2, B1, C1 and D1

When moderate density offices are constructed on these four parcels, the employees of these buildings will need certain convenience services, such as restaurants, newspaper and tobacconist

shops, cleaners and hairdressers. Retail and service commercial uses are typical ground floor uses of most office towers. These convenience services will have a built-in daytime market from the office employees and should not impact the lower quality and convenience-oriented retail and service commercial strip along Eglinton Avenue West, which is a fairly long uphill walk from the Black Creek Drive intersection.

Parcel A1 (Coronation Park)

If the soil in Coronation Park were unsuitable for continued open space uses or for new residential units, one alternative use would be for a city core focussed around a civic square which would form the basis of a "festival centre". A festival centre is a new type of retail and service commercial area which does not have a department store or a supermarket to anchor it as does a mall. It attracts consumers due to its "ambience", which is partially a function of its design, but also a function of the draw of its restaurants and specialty stores. A York civic square/festival centre could have the following three components (these are illustrative only):

- A square could form a gathering point for the citizens of the City of York adjacent to their City Hall.

  Currently, the City lacks a central, clearly-identifiable symbolic focus for the community. The centre of the square could have a fountain, or a statue, or a band stand, while the edges of the square could have weather protection with colonades or arcades. Such a design should appeal to the citizens of York as over half of them come from non-Canadian cultures where the town square is at the focus of a pedestrian-oriented, urban life.

- Restaurants, and specialty stores and services could form the edge of such a square (under the weather protection). The tables of the restaurants would spill out onto the square during the warmer months.

  Unlike the central squares of the cities of Mississauga, Toronto and Scarborough, for example, which have no ancillary commercial functions (and consequently are relatively "dead" areas much of the time), the integration of commerce around a City of York square would animate the area during both the day and the evening, and during the weekday as well as on the weekend. The commerce would help to create a functioning "people place", a viable community as well as a commercial focus.

Whereas the successful suburban downtowns analyzed in Chapter One have as an important component a regional shopping facility, the City of York could improve upon their design by having a different form of regional commercial attraction, one that was also open (under current legislation) on Sundays. The suburban downtowns of Mississauga and Scarborough, for instance, derive great strength from their regional retailing, but their public areas are weak (partially because the developer does not wish to detract from the retail mall). The central area of York, which is not dominated by one developer, could provide a more dynamic interaction between public and private spaces.

A distinctive and entertaining environment around a civic square could give a marketing edge for the attraction of other commercial, industrial and residential activities to the Black Creek Corridor.

In Clayton Research Associates' opinion, a well designed, functional civic square could also attract consumers from other municipalities. A relatively accessible metropolitan location, like the Black Creek Corridor, can function effectively as a retail and commercial focus for a large area. An example is the mix of stores and services along northern Avenue Road just to the south of Highway 401, which appeals to a wide metropolitan market due to its good accessibility.

- A pedestrian bridge linking the square to the office and mixed-use developments on the parcels around the Eglinton Avenue West and Black Creek Drive intersection could help to integrate all the Black Creek Development into a coherent civic focus as well as attracting lunch-time trade from the employees there (a pedestrian bridge would create a short walk between the office towers and the square). The parking structures on the parcels around the intersection could be used after office hours by consumers from outside the City of York (since office use does not conflict with peak retail and leisure use).

In Clayton Research Associates' opinion, a York civic square/festival centre that was "a people place", with a retail mix that was different from (1) the convenience-oriented retailing along Eglinton Avenue West and (2) the uses found in malls anchored by department stores and supermarkets, should be a market success and should not directly compete with the type of retailing currently found along Eglinton Avenue West nor in the malls (both existing and proposed) within the City of York.

The type of "festival centre" envisaged, focussed around the square, would be a mid- to down-market version of the immensely popular Quincy Market near the centre of the City of Boston. It

would be somewhat down-market due to the lower income structure of the City of York. It should be popular as (1) most York inhabitants derive from cultures that focus community life on urban squares, (2) it would be distinctive from the retail and service commercial structure of, at least, the western portion of the Toronto area, and (3) a "European style" square should be a "themed attraction" to consumers from other municipalities and, to a certain extent, a "destination event" for tourists.

Of course, the civic square/festival centre concept should be tested in market terms and in impact terms before its actual development.

CONCLUSIONS REGARDING THE RETAIL AND PERSONAL SERVICE POTENTIAL OF THE BLACK CREEK CORRIDOR

The conclusions about the development potential and the impact of new or upgraded retail and personal service commercial uses are as follows.

Parcels A9 and B8 through B10

An upgrade of the buildings, streetscape and merchandizing could be encouraged by the effective operation of a Business Improvement Area over the medium term. These parcels including parcel B7 and the residential areas immediate south of parcels B7 through B10 could experience increasing pressure for redevelopment when the Black Creek Corridor becomes a fully developed entity.

Parcels A2, B1, C1 and D1

Ancillary retail and personal service uses are an appropriate part of office development and should not impact the convenience stores and personal services currently located on Eglinton Avenue West.

Parcel A1

Under certain physical and market circumstances, the redevelopment of Coronation Park as a civic square/festival centre concept, targeted to the ethnic mix of the City, could be a success in market terms and could help to animate the whole centre of York outside normal working hours.

CHAPTER SIX

HOTEL POTENTIAL

The terms of reference for the Black Creek Corridor Study called for the consultants to critically review market studies from developers who had proposed hotels in the Black Creek Corridor.

LACK OF INPUT PRECLUDED HOTEL ANALYSIS

Determining hotel commercial potential proved impossible as the City of York did not receive market studies on hotel potential from any of the development proponents.

However, Clayton Research has a relatively positive impression of the Black Creek Corridor for the location of a hotel, for the following reasons:

- The industrial area adjacent to the Corridor, and notably an international corporation like Kodak Canada Inc., should represent a strong bed and meeting room demand;
- With medium density office buildings at the intersection of Black Creek Drive and Eglinton Avenue West, the bed and meeting room demand should be increased somewhat;
- The executives in the industrial area as well as in the office buildings would be a prime market for a hotel's restaurant and health spa facilities;
- The Corridor is relatively accessible from Highway 401 and is relatively convenient to the airport; and
- There are no competing hotels in the immediate area.

It is the opinion of Clayton Research that a middle- to low-priced, full-service hotel chain would seriously consider a well located site in the Black Creek Corridor. Either parcel A2, B1 or C1 could provide the visibility a hotel chain typically looks for.

TENTATIVE CONCLUSIONS REGARDING HOTEL POTENTIAL

The following conclusion is based on Clayton Research's judgement and experience in hotel studies and not on any thorough market research.

Parcels A2, B1 and C1

For planning purposes, a hotel might reasonably be included in one of the building envelopes of parcels A2, B1 or C1.

CHAPTER SEVEN

CONCLUSIONS

This final chapter draws together the conclusions of the separate analyses regarding commercial, industrial and residential potential of the Black Creek Corridor and outlines some key questions for the next phase of the study team's work.

RESULTS OF THE MARKET POTENTIAL AND DEVELOPMENT FEASIBILITY RESEARCH

The findings of the foregoing chapters may be summarized as follows:

- Development Potential Exists for a York Civic Focus

  There is a market potential for the vacant land in the Black Creek Corridor to be developed, and certain other parcels in the Corridor to be redeveloped, in a manner which creates a civic focus as the heart of the City.

- Long Term Planning Horizon Required

  Due to market realities, and to the constraints of the Corridor, the creation of a York Civic Focus will not occur in the short term. The market analysis indicates that a planning horizon of up to 20 years may be required to bring the concept to total fruition.

- Significant Range of Commercial and Residental Development Possible

  The following development potentials were identified in the previous chapters:

  - Office Commercial: Up to 123,000 square metres (1.3 million square feet), notably on the parcels surrounding the Black Creek Drive and Eglinton Avenue West intersection (parcels A2, B1, C1 and D1 and the Coronation Park area, parcel A1);

  - Residential: Up to 2,300 new apartment units, notably on the Coronation Park parcel (parcels A1, A2, A4 through A8, B1, B2 and C1);

  - Continued mixed industrial-commercial uses on the industrial lands in the northwest portion of the Corridor in the medium term with the potential of redevelopment for low density office structures in the longer term (parcels D2 and D3);

- Ancillary retail and personal service commercial uses as part of mixed-use commercial office complexes;

- The possibility of an innovative civic square/festival centre with retailing specifically targeted to the income and ethnic mix of residents of York on the Coronation Park lands if not used for residential or park uses (parcel A1); and

- The possibility of a mixed-use complex at the intersection of Black Creek Drive and Eglinton Avenue West containing a middle- to low-priced hotel (parcels A2, B1 and C1).

There are a number of parcels where commercial office and residential potentials overlap to create the opportunity for significant mixed-use developments (parcels A1, A2, B1 and C1).

- Possibility of a Lively City Square Focus

The possibility was identified to create a distinctive and entertaining environment around a civic square on the Coronation Park parcel. A "European style" square should be a destination event to York residents and other consumers, including tourists. It could animate the centre of the City in non-business hours and could give a marketing edge for the attraction of other commercial, industrial and residential activities to the Black Creek Corridor. The concept should be further tested in market and impact terms.

- No Industrial Re-Use Foreseen for the Hyde Avenue Area

No new activity was identified that could start a process of industrial regeneration of parcels B3 through B6. If the area were totally cleared of the existing uses (with detrimental impacts on nearby activities which use the land), and if the contaminated soil were removed, there is a possibility that the area could be used for parkland or perhaps for social housing. The creation of parkland on this portion of the Black Creek Corridor could theoretically substitute for better located parkland and recreational facilities elsewhere in the Corridor (such as Coronation Park or parcel A-2), which could then be used for commercial or residential purposes.

- Upgrading of the Eglinton Avenue West Retail Strip

Improvement of the convenience commercial uses on the land parcels fronting Eglinton Avenue West in the eastern sec-

tion of the Corridor may be encouraged in the medium term through the formation of a Business Improvement Area (parcels A9 and B8 through B10). In the longer term, this area and the residential area immediately to the south of parcels B7 through B10 could experience increasing pressure for redevelopment.

Ancillary retail space in the new office or mixed-use developments (targeted to the workers and residents of these buildings) should not, in Clayton Research's experience and opinion, detract from the walk-in, neighbourhood trade of the Eglinton Avenue West commercial retail strip.

QUESTIONS FOR PHASE TWO

The second phase of the study is the formulation of development options for the Black Creek Corridor and the third phase is the recommendation of an optimal design. Opinions will be sought from both the City of York and the public as input for both phases.

Some difficult questions must be resolved in the second phase of the work:

- The Future of Coronation Park

  The market research identified the possibility of residential, commercial office and, perhaps, commercial retail development on Coronation Park (parcel A1) if a decision is made not to keep the park. The future role of Coronation Park, the largest land parcel in the Black Creek Corridor, is of critical importance in the selection of development options. A "critical mass" of development in the York Civic Focus could occur much sooner if Coronation Park were available for residential or commercial purposes.

- The Nature of Mixed-Use Parcels

  The study of development options for the Black Creek Corridor must address the optimum combination of uses on all parcels to obtain a "synergy" of development activity. Synergy is a term that describes the phenomenon of the attractiveness of a development as a whole being greater than the attractiveness of the sum of its parts (since the juxtaposition of different uses creates a dynamic interaction between them).

- The Identity of the York Civic Focus

  When considering the various development options, attention must be given to the identity, image and quality of the massing of buildings and juxtaposition of uses such that a distinctive civic focus for the City of York is created.

APPENDIX B

TRANSPORTATION COMPONENT
(PHASE I)

BLACK CREEK CORRIDOR STUDY

TRANSPORTATION COMPONENT

Phase I

Background Research and Analysis

Prepared For: The Corporation of the City of York

Prepared By: B-A Consulting Group Limited

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1.0 INTRODUCTION

The transportation component of the **Black Creek Corridor Feasibility Study** is being undertaken in order to define the appropriate transportation context for future prospective development within the Black Creek Corridor study area. These results, along with complementary market, planning and geotechnical findings are intended to assist the City of York in development of a comprehensive development strategy for the subject lands.

Key issues to be addressed as part of the transportation planning input include the following:

- The capability of the existing transportation infrastructure to support new development within the study area.
- The nature of potential transportation system improvements which could further enhance the accessibility of the subject lands.
- The scale of development within the Black Creek Corridor study area which would be consistent with existing/future road and transit system elements.

This report summarizes the Phase I portion of the transportation plan. The primary emphasis at this stage has been directed towards acquiring, reviewing and summarizing available data pertaining to existing conditions in the study area environs. Based upon a firm understanding of prevailing conditions, preliminary observations and findings are set out regarding likely order-of-magnitude development potential within the context of existing and several alternative improved transportation infrastructures.

The remainder of this report is structured as follows. Chapter 2 describes the data acquisition and summary procedures. Brief summary

results are then provided for each component item, namely -- traffic volumes, relative link capacities, driving speeds, surface transit service, and historical travel growth trends. Chapter 3 summarizes the preliminary implications of the existing transportation network on site development potential. Finally, Chapter 4 identifies several options for future improvements to be explored and the likely order-of-magnitude implication of each on site development potential.

A significant portion of the base input data to this report was made available from two ongoing studies, namely -- **The Northwest Corridor Study - Phase I** and the **St. Clair/Weston Traffic Management Study**. The assistance of the Metropolitan Toronto Planning Department in this regard is gratefully acknowledged.

2.0 EXISTING CONDITIONS

2.1 Data Preparation

The study area consists of a parcel of land approximately 80 hectares (200 acres) in size, centered on Eglinton Avenue West and Black Creek Drive in the City of York. Since one key component of work involved an appraisal of the level of accessibility afforded this area by the area road network, a study **cordon** was defined. The study cordon, which surrounded the study area at a distance of about 1.5 kilometers, was further disaggregated into four **screenlines** -- namely, south, east, and west. The purpose of these screenlines was to facilitate an approximation of the total (road) access capacity into and out of the study area and it's environs from each of the cardinal directions. In this case, the screenlines were defined such that all major routes crossing them were routes that serve the study area reasonably directly (see Figure 1). The routes thus included are:

- Eglinton Avenue West
- Weston Road
- Jane Street/Trethewey Drive
- Black Creek Drive
- Keele Street
- Rogers Road
- Old Weston Road

Figure 1 also indicates the designation and jurisdiction of the various roads serving the study area. Several roads (notably St. Clair Avenue West, Lawrence Avenue West, and Caledonia Road) were excluded from the cordon since they do not directly serve the study area. However due

to their proximity, they do provide important traffic distribution functions and hence various data on these road segments were summarized as well.

2.1.1 Traffic Volumes

Figure 2 summarizes the typical maximum directional link traffic volumes for both the morning and afternoon design hours on all key roads in the (cordoned) larger study area. Traffic volumes were obtained from both Metropolitan Toronto and the City of York in the form of turning movement counts for the key intersections. In addition, link volumes were obtained for three major routes through the area : Lawrence Avenue West, Eglinton Avenue West, and Jane Street. These volumes are derived by Metropolitan Toronto staff from recent intersection and automatic tube counts. The most recent intersection count data were used to derive the link volumes illustrated in Figure 1, the link volume data being used only when it was necessary to clarify a discrepancy between turning movement counts at two adjacent intersections. Maximum hourly volumes for both the morning (AM) and afternoon (PM) peak periods were extracted.

2.1.2 Lane Availability

In order to assess the relative capacities of major road links serving the study area, data regarding the effective number of lanes available to traffic during both the AM and PM peak periods was collected. This included not only the existing numbers of lanes on each road link and at each key intersection approach, but also the parking and stopping

restrictions in effect. Most of the data were obtained from field observations supplemented with intersection configuration sketches provided by Metropolitan Toronto.

As indicated in Figure 3 for the PM peak period, the result is a comprehensive "picture" of the existing road infrastructure. The situation during the AM peak period will, for the most part, be the reverse of that shown in Figure 3.

2.1.3 Driving Speeds

In order to identify potential capacity restrictions in the existing road network, average driving speeds were obtained from Metropolitan Toronto for key road links in the network. Figure 4 illustrates the most recently collected speed data (1986) for the AM peak period in the peak direction of travel, based on a limited number of driven "runs" along the indicated street segments. This data was available for the AM peak period only. In general, AM traffic conditions are more representative of "pure" commuter traffic, while in the PM, "mixing" occurs due to traffic generated by other land uses such as retail.

2.1.4 Transit Service

An overview of the level of service currently provided in the area by surface transit is provided on Figure 5. The number of scheduled hourly vehicles in each direction along the major study are roads during the PM

rush hour were compiled from the TTC's "Scheduled Service Summary". GO transit data was also obtained. The PM data was used to correspond with the PM traffic conditions illustrated in Figures 1 and 2. Comparable levels of service are provided in the AM.

2.1.5 Corridor Growth Trends

In order to examine potential long-term travel growth implications due to the longer distance traffic movements through the area, historical cordon count data was obtained from Metropolitan Toronto for the last ten years. Also available, were daily ridership figures for the Georgetown GO Transit line. Tables 1 and 2 set out average annual growth rates by direction and time period, based upon the incremental two-year intervals or upon overall averages from the base year (1975).

2.2 Findings

The data summarized in Figures 1 through 5 and on Tables 1 and 2 were reviewed. A synopsis of key findings follows:

2.2.1 Area Road System Traffic Flows (Figure 2)

- The two high-capacity arterial roads, Eglinton Avenue (west of the study area) and Black Creek Drive, currently carry traffic volumes in the range of 900 to 1000+ peak hour peak direction vehicle trips (phpdvt) per lane.

- Traffic volumes on other arterials range from a moderate 600 to 700 phpdvt per lane on segments of Jane and Keele Streets, to a low of

350 to 500 phpdvt on routes such as St. Clair Avenue and Eglinton Avenue (east of the study area)

- o Peak directional flows are typically south and/or east during the morning peak and north and/or west during the afternoon rush period. Black Creek Drive, north of the study area, has relatively high off-peak direction traffic flows, reflecting its 'attractiveness' as a high-capacity controlled-access route north of Lawrence Avenue.

2.2.2 Relative Vehicular Capacities of Major Approach/Departure Routes (Figure 3)

- o Most of the (major) study area roads have basic 4-lane cross-sections with exclusive left turn lanes at key intersections. Significant exceptions are as follows:
  - Eglinton Avenue (between Weston and Black Creek Drive) has a 6-lane (plus turning lanes) cross-section
  - Caledonia and Alliance pavement widths accommodate 2 wide lanes, which incorporate on-street parking.
  - St. Clair Avenue (east of the study area) has a 6-lane cross-section, however the presence of streetcar tracks significantly reduces its overall capacity.
  - Trethewey Drive has a 4-lane cross-section, but a more limited number of exclusive left turn lanes.

- o NO STOPPING regulations, which seek to maximize traffic capacity, generally apply in the peak demand directions; i.e. northbound/westbound during the afternoon peak and reverse in the morning. One exception to this is Rogers Road.

- o Specific comments related to the vehicular capacities of key road links follow:
  - **Eglinton Avenue** (west of the study area) is substantially all reverse frontage. High curb-lane capacities result. The

highest capacity (6-lane) segment of Eglinton Avenue directly penetrates the western study area boundary and facilitates a relatively good level of service through the Eglinton/Black Creek Drive intersection.

Vehicular capacities on Eglinton Avenue east of the study area are significantly reduced due to the high incidence of errant parking and stopping in the curb lane, attributable to the adjacent strip commercial development.

- **Black Creek Drive** is a controlled-access (high-capacity) facility north of its intersection with Lawrence Avenue. This location is a key capacity-limiting 'valve' for southbound movements (during the AM peak period), not unlike the Allen Road/Eglinton Avenue junction point.

- **Jane Street** provides an alternate northerly route to the Black Creek - Highway 400/Highway 401 corridors for study area traffic. **Trethewey Drive** affords a relatively high-capacity connecting route function between Jane Street and northerly portions of the study area.

- **Keele Street** affords relatively limited direct site access capacity from the north, due to its jogged configuration across Eglinton Avenue.

- **Weston Road** is a lower-capacity urban arterial due to the presence of significant strip commercial frontage.

2.2.3 Driving Speeds (Figure 4)

o The specific road segments in the study area environs which exhibit relatively low average driving speeds (in the peak direction of flow) are set out below. The likely contributing factors, if evident, follow each reference in parenthesis.

- Jane Street, north of Lawrence
- Eglinton Avenue, Weston to Keele (Eglinton narrowing, Eglinton/Keele intersection)
- Black Creek Drive, south of Eglinton (termination of Black Creek Drive at Weston Road)
- St. Clair Avenue, east of study area (streetcar service)

o Specific road segments exhibiting relatively high average peak period peak direction (ppd) driving speeds along with likely contributing factors are as follows:
  - Black Creek Drive, Lawrence to Eglinton (capacity restraint at Lawrence has been passed).
  - Weston Road, west of Jane and Eglinton to Black Creek
  - Jane Street, Weston to Eglinton

2.2.4 Surface Transit Service (Figure 5)

o In terms of scheduled vehicle headways, relatively high levels of transit service (3 minute or less headways) are afforded on the three east-west area streets, Lawrence/Eglinton/St. Clair, generally oriented to the subway system.

o Due in part to street system continuity, comparably high frequency transit service on north-south area streets is limited to Jane Street. Moderate frequency service (5± minute headways) is provided on Weston Road and Keele Street.

o No transit service currently uses Black Creek Drive.

o GO train service on the Georgetown line is a uni-directional service, with 4 trains oriented towards downtown Toronto during the morning rush period and reversed during the afternoon peak period. The limited hours of operation and directional nature of the service limit

the line's overall "attractiveness" and, in particular, its ability to enhance the accessibility of the subject area.[1]

2.2.5 GO Transit Rail Ridership Growth - Georgetown Line (Tables 1A, 1B, 1C)

- The data indicate relatively steady increases in ridership of some 5 to 7 percent per year, with the exception of the 1982/83 period.

- Due to the ability to simply add additional cars per train, there is obviously considerable additional line-haul capacity on this service.

2.2.6 Study Area Traffic Growth (Tables 2A, 2B, 2C)

- Key findings across the **northwest** cordon, which includes Black Creek Drive and Eglinton Avenue, are set out below:
  - Overall, average increases have averaged about 2 percent per year in both the peak and off-peak directions.
  - Significantly higher increases were evidenced during the period in which Black Creek Drive was opened (1981 to 1983).

- Key findings across the **southeast** cordon are as follows:
  - Typical average annual increases in the peak commuter direction (south or eastbound during the morning, and reverse) are in the order of 1-1/2 to 2 percent per year.
  - In the off-peak commuter direction of travel (north or westbound during the morning, and reverse) overall traffic volumes have remained relatively constant.

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[1] Obviously, an Eglinton GO rail station would be the first requirement to achieve any direct transit accessibility benefits from the line.

3. PRELIMINARY (NEAR TERM) SITE DEVELOPMENT IMPLICATIONS

At this preliminary stage, specific study area development options are not under consideration. Based upon the foregoing review, however, it is possible to identify general strengths and weaknesses in the existing transportation system. These findings can be used to develop order-of-magnitude estimates of the study area development which might reasonably be supported.

Although various study area land use options are under review at this time, it was decided for the purposes of this report to examine development potential based upon consideration of one representative land use only. Commercial office development was selected as the most appropriate "proxy" land use since, on a floor area basis, it would generate a relatively intensive peak hour peak direction impact on the major roads in the study area and it's environs. Based upon examination of the relative traffic intensities and orientation exhibited by other land uses, accessibility findings related to commercial office uses can be translated to other development options.

3.1 Black Creek Corridor Vehicular Access

The Black Creek Corridor study area is served by roads whose primary existing function during peak periods is to Toronto Central Area employment opportunities with the surrounding (suburban) population base. The consequences of this situation are apparent both in the arrangement of the current road network and in the patterns of the traffic using them. Of the three major routes that pass close by or through the study area, two are oriented northwest/southeast, namely Black Creek Drive and Weston Road (Note: Trethewey Drive is also oriented on this axis, but cannot be considered a major route beyond the limits of the study cordon). To the northwest, these routes connect directly to Highway 401, while to the southeast, they generally merge into a more standard

north/south and east/west-oriented road grid. It should be recognized, however, that the specific factors which make these roads "attractive" through routes (from and to the Highway 427/401 corridors), also enhance the resultant perceived accessibility of the Black Creek study area.

In general 60% to 65% of the total two-way peak hour traffic is oriented in the peak direction, that is south and/or east during the morning, and reverse during the afternoon. As a result, there is generally a moderate level of off-peak direction residual capacity on these roads, even given the unfavourable parking/stopping restrictions which usually apply in the off-peak direction of travel.

Looking at the trends in traffic growth from the south and east (Table 2C, Southeast Cordon), it can be seen that the northbound and westbound traffic on these roads during the AM peak period -- the off-peak direction of flow -- has actually declined over the last ten years, despite a steady increase in the peak direction traffic.

In order to assess the vehicular access capacity to serve the Black Creek Corridor study area, it is necessary to consider the nature and orientation of available travel routes across the study area cordon/screenlines. Key findings in this regard follow:

- Highway 427 and 401 provide a high-capacity distribution function for longer-distance trips oriented north, west, or northwest of the site. Black Creek Drive, which extends northerly to Highway 401, is certainly the single most "attractive" connection to the highway system. Eglinton Avenue, however, provides a reasonable alternate route for study area traffic to access the Highway 427/401 system across the westerly site cordon. These factors, combined with the northwesterly orientation of certain roads suggest that vehicular access capacity across the north and west study area screenlines can reasonably be evaluated in aggregate form.

- Considering commercial office development within the study area, it is evident that the peak direction site traffic flows across the north and west sides of the study area cordon would be superimposed on the prevailing peak direction of commuter traffic flows.

- Again considering commercial office development within the study area, it is evident that the peak direction of site access demands across the east and south study area screenlines is opposite and complementary to prevailing background conditions. Where alternatives exist, therefore, site commercial traffic would favour routes crossing the east (off-peak direction) as opposed to north (peak direction) screenlines. For example, traffic approaching the study area along Highway 401 from the east might logically choose Black Creek Drive as their connecting route during non-peak periods. During peak periods, however, alternate connecting routes using, for example, off-peak direction segments of the Allen Road, Lawrence and Eglinton Avenue may be preferred.

3.2 Road Network Overview

As discussed previously, the peak direction traffic demands for commercial office development within the Black Creek Corridor are reverse flows, or complementary to, existing traffic demands across the south and east study area screenlines. For preliminary evaluation purposes, therefore, it can reasonably be assumed that the transportation access capacity to the study area will be constrained by routes crossing the north and west screenlines. In order to adequately serve any major new commercial development within the Black Creek Corridor, therefore, composite vehicular capacity on the following roads must be available:

- Eglinton Avenue from/to the west.
- Weston Road from/to the northwest.
- Jane Street/Trethewey Road from/to the north.
- Black Creek Drive from/to the northwest.
- Keele Street from/to the north.

The existing peak hour traffic flows on roads serving the north and west approaches to the study area screenlines are summarized in Table 3. As indicated therein, composite total peak hour, peak direction vehicle trips range from approximately 6,000 to 6,500 vehicles.

Although currently available capacity on these routes to serve the study area may vary considerably, it is reasonable for the purposes of this report to consider that residual capacity, amounting at least to 5 to 10 percent of existing peak-direction demands, would be available. This would translate into an existing hourly ingress potential (from the north/west) during the morning peak hour of between 300 and 650 vehicles -- and equivalent egress potential during the afternoon design hour.

3.3 Transit Network Considerations

Transit service to the study area and it's environs is provided, at this time, solely by surface vehicles operating on the major roads in mixed traffic. Thus, although reasonably frequent service is provided on these routes, the potential to "attract" additional transit riders is limited by the relative overall operating speeds which can be achieved.

It is reasonable to expect, therefore, that the current transit modal share experience, of perhaps 20 to 25 percent, will generally be exhibited by new development within the Black Creek Corridor study area. Furthermore, it is likely that such transit ridership levels can be achieved largely within the context of the exiting route vehicle/service level infrastructure. The need for route restructuring or service enhancements can only be determined once specific new development sites have been identified.

3.4 Existing Site Development Potential

Translation of available vehicular access capacity to development potential necessitates additional assumptions concerning the nature of development and resultant travel characteristics. For preliminary evaluation purposes, the following parameters have been adopted:

- Commercial office development on the site.
- Peak hour, peak direction vehicle trip rate of 1.3 vehicles per 1000 square feet (93 sm) of office floor area.[2]
- Between 50 and 60 percent of total approach traffic oriented across the key north and west study area screenlines.

Combination of the foregoing assumptions suggests that current site development potential in the range of 500,000 to 1,000,000 square feet of office floor area (or equivalent) could reasonably be contemplated without major upgrading of the existing transportation infrastructure. Further refinement and adjustment of this preliminary 'benchmark' development threshold will clearly be required once specific development sites and land use alternative are identified.

Substantial development beyond the indicated base level will likely require the implementation of additional road and/or transit improvements. Section 4 of this report provides an overview of key infrastructure changes which would significantly enhance the accessibility and, hence, development potential within the Black Creek Corridor study area.

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[2] This trip generation rate was based on the following typical characteristics : an auto mode split of 75% to 80%, a vehicle occupancy of 1.1 to 1.2 persons per vehicle, a peak hour factor of 50% to 60%, and an employee density rate of 275 to 300 sq. ft. per employee (gross).

4. IMPLICATIONS OF FUTURE TRANSPORTATION SYSTEM IMPROVEMENTS

The Black Creek Corridor study area is strategically located to derive significant accessibility benefits from several planned major transportation system improvements. These are described in the following transit service-related or road-related orientation.

4.1 Transit Service Improvements

4.1.1 Eglinton Rapid Transit

One key planned improvement affecting the study area, as set out in the **Network 2011** document, is the implementation of an Eglinton West Rapid Transit line. This facility is intended to ease the rapidly-growing travel demand across the west Metropolitan Toronto boundary. The service would generally extend along Eglinton Avenue, between Eglinton Station on the Spadina subway line and Renforth Drive. By virtue of integration with planned complementary transit service improvements in the Highway 403-Eglinton Avenue corridor within Mississauga, a rapid transit link between Mississauga City Centre and downtown Toronto would be achieved.

The specific technology to be used on the Eglinton West Line has not been determined. Operation of buses in an exclusive or semi-exclusive right-of-way could potentially be introduced with conversion to light rail (streetcar) or full subway technology at a future date. Station locations in the study area have been conceptually proposed in the vicinity of Weston Road (near the Georgetown GO rail crossing) and Keele Street.

The timing of implementation of an Eglinton Rapid Transit service remains unclear. Although it was accorded a high priority rating in the review of various rapid transit alternatives in the **Network 2011** review, the currently-identified first priority for major transit service upgrading within Metropolitan Toronto is the Sheppard (East) Rapid Transit Line. A

review of the timing and priority for introduction of additional rapid transit service is to be completed on/or before 1992.

4.1.2 GO Rail

A major study[3] of future improvement options for the Georgetown GO Rail service was recently completed. Based upon review of this study and discussions with GO Transit staff, the following potential improvement elements were identified:

- The construction of a station near Eglinton Avenue would clearly be the first priority for enhancement of study area accessibility. A station could be located either north or south of Eglinton Avenue, however it would appear that better options are available on the south side.

  Initially, a simple one-side platform could be constructed with provision for parking of a nominal 100 to 200 vehicles. In the future, integration of the station area and/or parking facilities with new development sites could be contemplated.

  While provision of an Eglinton GO Rail Station is a necessary first step, this improvement by itself will only modestly enhance the study area's transit accessibility.

- Limited service enhancements, which would involve 20 minute headways during peak periods in one direction only would likely represent the next step. Capital costs for implementation to/from Union Station to various outlying points between a new Highway 27 (Woodbine) Station or all the way to Georgetown were estimated at between 56 and 80 million dollars.

---

[3] **GO Transit Richmond Hill and Georgetown Review**, Transportation Systems Associates, March, 1986.

- The long-term recommended improvement strategy was to implement full two-way GO Rail service between Union Station and Halwest Junction (located between Malton and Bramalea Stations) and only limited service from that point to Brampton. West of Brampton the existing service would be maintained. Total capital costs were estimated at approximately 130 million dollars.

No specific implementation timing for the foregoing is available. Aside from introduction of an Eglinton station and perhaps marginal increases in one-way service frequency, the other major improvements are considered to be long-term.

4.1.3 The Gateway Concept

Combination of the foregoing Eglinton Rapid Transit and GO Rail improvement schemes affords an opportunity to create a transportation "gateway" within the Black Creek study area. The relatively high accessibility and modal transfer potential evidenced at the conflux of these two high-order transit services will invariably act as a catalyst for development in the immediate environs.

4.2 Road Improvement Options

- The widening of Black Creek Drive to six lanes, south, through the Lawrence Avenue intersections and potentially beyond.

- The grade separation of the intersection of Black Creek Drive at Lawrence Avenue. This location was identified as a key capacity restraint to the study area since this is the first significant intersection on Black Creek Drive south of Highway 401. Complementary improvements such as road widening and the addition of turning lanes on Black Creek Drive at the Trethewey and/or Eglinton intersections might also be required, depending upon the location and scale of development proposed.

One strategic advantage of introducing selective improvements to Black Creek Drive is that the relative vehicular capacity increase provided can, in large part, be used to serve development in the area immediately tributary to Black Creek Drive (including the study area), since through traffic capacity would be unchanged.

4.3 Summary Implications

Considering both the direct and indirect accessibility benefits of the foregoing improvements, the following order-of-magnitude conclusions regarding impact on site development potential can be derived (based on commercial office development for the reasons previously discussed):

- Transit improvements such as an Eglinton Rapid transit service could increase base (existing) development potential by at least 75 to 100 percent.

- Road improvements on Black Creek Drive as described previously could certainly at least double the preliminary base development thresholds identified herein.

- Taken together, the effect of both road and transit improvements would be cumulative.

APPENDIX

TABLE 1A

10 YEAR GO TRANSIT RIDERSHIP
(Measured at Highway 401 on Georgetown line)

	1975	1977	1979	1981	1983	1985
Southeast (AM)	1,309	1,998	2,074	2,537	2,197	2,490
Northwest (PM)	1,053	1,733	1,764	2,119	1,996	2,174
TOTAL	2,362	3,731	3,838	4,656	4,193	4,664

TABLE 1B

AVERAGE ANNUAL GROWTH RATES - (2 year increments)

	1975	1977	1979	1981	1983	1985
Southeast (AM)	-	23.5%	1.9%	10.6%	-6.9%	6.5%
Northwest (PM)	-	28.3%	0.9%	9.6%	-2.9%	4.4%
TOTAL	-	25.7%	1.4%	10.1%	-5.1%	5.5%

TABLE 1C

AVERAGE ANNUAL GROWTH RATES - (1975 base)

	1975	1977	1979	1981	1983	1985
Southeast (AM)	-	23.5%	12.2%	11.7%	6.7%	6.6%
Northwest (PM)	-	28.3%	13.8%	12.4%	8.3%	7.5%
TOTAL	-	25.7%	12.9%	12.0%	7.4%	7.0%

TABLE 2A
10 YEAR TRAFFIC VOLUME GROWTH ACROSS
TRAFFIC CORDON SCREENLINES

Direction :	1975 AM	1975 PM	1977 AM	1977 PM	1979 AM	1979 PM	1981 AM	1981 PM	1983 AM	1983 PM	1985 AM	1985 PM
NORTHWEST CORDON												
South or East	15,249	16,310	16,477	18,125	17,274	18,745	16,047	19,013	17,536	20,312	18,605	20,517
North or West	14,564	17,161	13,601	17,037	15,558	18,543	17,432	19,806	14,991	18,959	18,635	20,224
TOTAL	29,813	33,471	30,078	35,162	32,832	37,290	33,479	38,819	32,527	39,271	37,240	40,741
SOUTHEAST CORDON												
South or East	8,603	10,516	9,385	10,064	9,147	9,480	9,644	9,800	10,546	10,699	10,345	10,373
North or West	7,496	10,774	7,141	10,937	6,647	10,413	7,093	11,062	6,696	11,031	6,954	12,443
TOTAL	16,101	21,290	16,526	21,001	15,794	19,893	16,737	20,862	17,242	21,730	17,299	22,816

TABLE 2B
AVERAGE ANNUAL GROWTH RATES - (2 year increments) :

	1975 AM	1975 PM	1977 AM	1977 PM	1979 AM	1979 PM	1981 AM	1981 PM	1983 AM	1983 PM	1985 AM	1985 PM
NORTHWEST CORDON												
South or East	-	-	3.9%	5.4%	2.4%	1.7%	-3.6%	0.7%	4.5%	3.4%	3.0%	0.5%
North or West	-	-	-3.4%	-0.4%	7.0%	4.3%	5.9%	3.3%	-7.3%	-2.2%	11.5%	3.3%
TOTAL	-	-	0.4%	2.5%	4.5%	3.0%	1.0%	2.0%	-1.4%	0.6%	7.0%	1.9%
SOUTHEAST CORDON												
South or East	-	-	4.4%	-2.2%	-1.3%	-2.9%	2.7%	1.7%	4.6%	4.5%	-1.0%	-1.5%
North or West	-	-	-2.4%	0.8%	-3.5%	-2.4%	3.3%	3.1%	-2.8%	-0.1%	1.9%	6.2%
TOTAL	-	-	1.3%	-0.7%	-2.2%	-2.7%	2.9%	2.4%	1.5%	2.1%	0.2%	2.5%

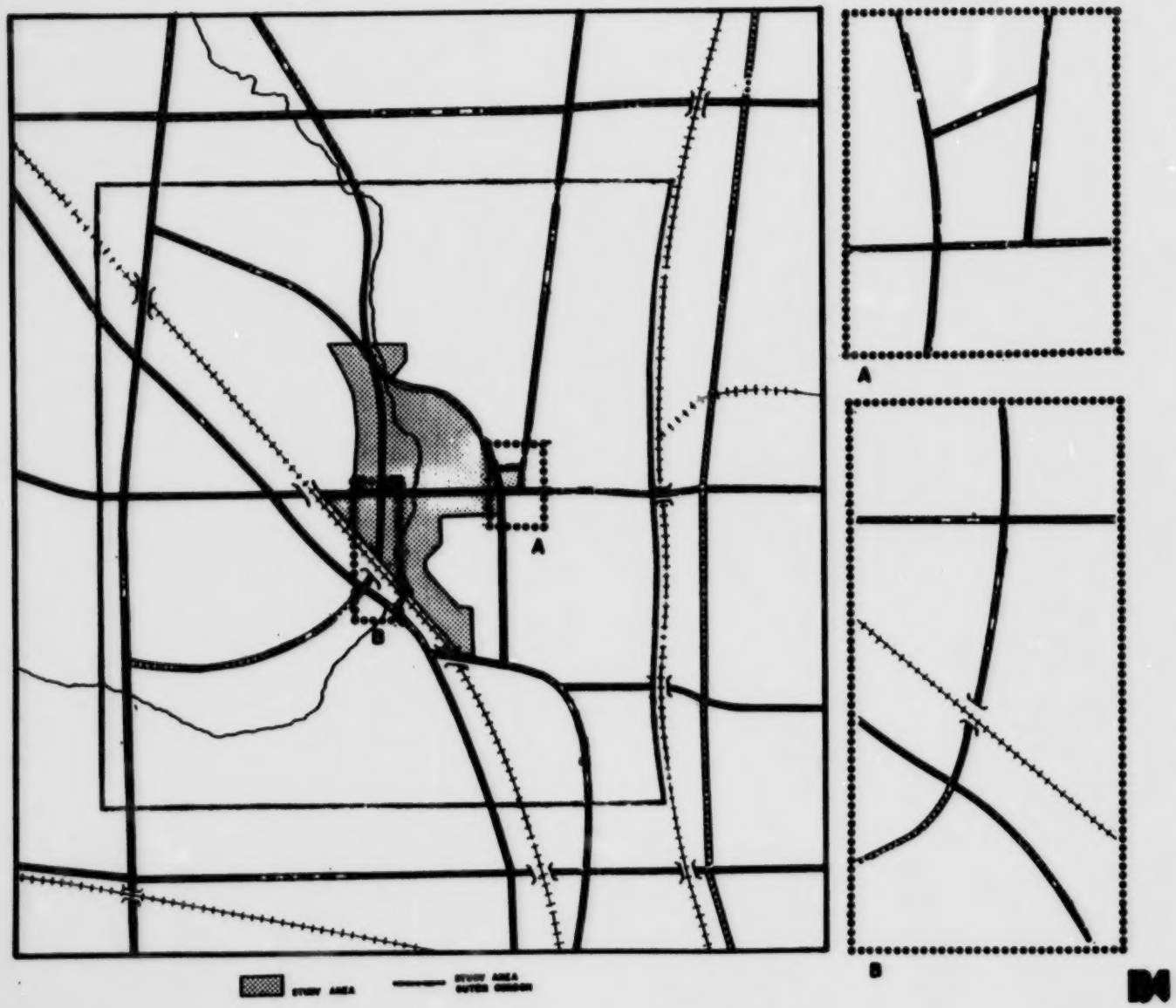
TABLE 2C
AVERAGE ANNUAL GROWTH RATES - (1975 Base) :

	1975 AM	1975 PM	1977 AM	1977 PM	1979 AM	1979 PM	1981 AM	1981 PM	1983 AM	1983 PM	1985 AM	1985 PM
NORTHWEST CORDON												
South or East	-	-	3.9%	5.4%	3.2%	3.5%	0.9%	2.6%	1.8%	2.8%	2.0%	2.3%
North or West	-	-	-3.4%	-0.4%	1.7%	2.0%	3.0%	2.4%	0.4%	1.3%	2.5%	1.7%
TOTAL	-	-	0.4%	2.5%	2.4%	2.7%	2.0%	2.5%	1.1%	2.0%	2.2%	2.0%
SOUTHEAST CORDON												
South or East	-	-	4.4%	-2.2%	1.5%	-2.6%	1.9%	-1.2%	2.6%	0.2%	1.9%	-0.1%
North or West	-	-	-2.4%	0.8%	-3.0%	-0.8%	-0.9%	0.4%	-1.4%	0.3%	-0.7%	1.5%
TOTAL	-	-	1.3%	-0.7%	-0.5%	-1.7%	0.6%	-0.3%	0.9%	0.3%	0.7%	0.7%

TABLE 3

STUDY AREA ACCESS ROUTES FROM THE NORTH AND WEST
Summary Characteristics

Route	Description	Maximum Volumes	
		AM Inbound	PM Outbound
Eglinton Avenue West	High Capacity Arterial	1,900	1,700
Weston Road	Low Capacity Arterial	600	650
Jane Street	Medium Capacity Arterial	850	1,250
Black Creek Drive	High Capacity Arterial	1,550	1,750
Keele Street	Medium Capacity Arterial	1,100	1,100
TOTALS		6,000	6,450

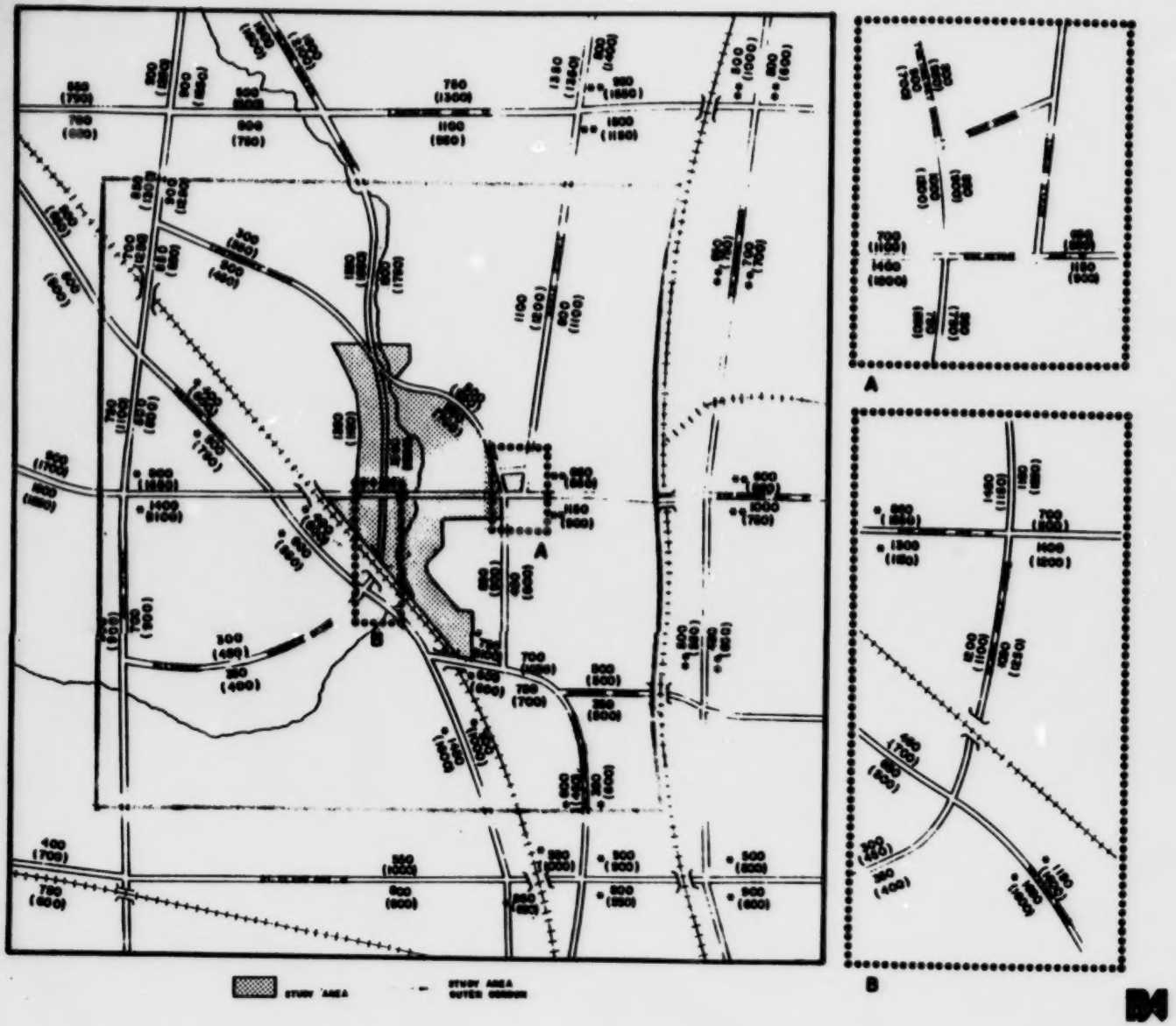


ROAD DESIGNATIONS and JURISDICTIONS

Legend

BLACK CREEK FEASIBILITY STUDY

Figure 1



DESIGN HOUR LINK TRAFFIC FLOWS

Legend

000 - AM Peak Hour Traffic Volume

(000) - PM Peak Hour Traffic Volume

* - Includes some 1986 data

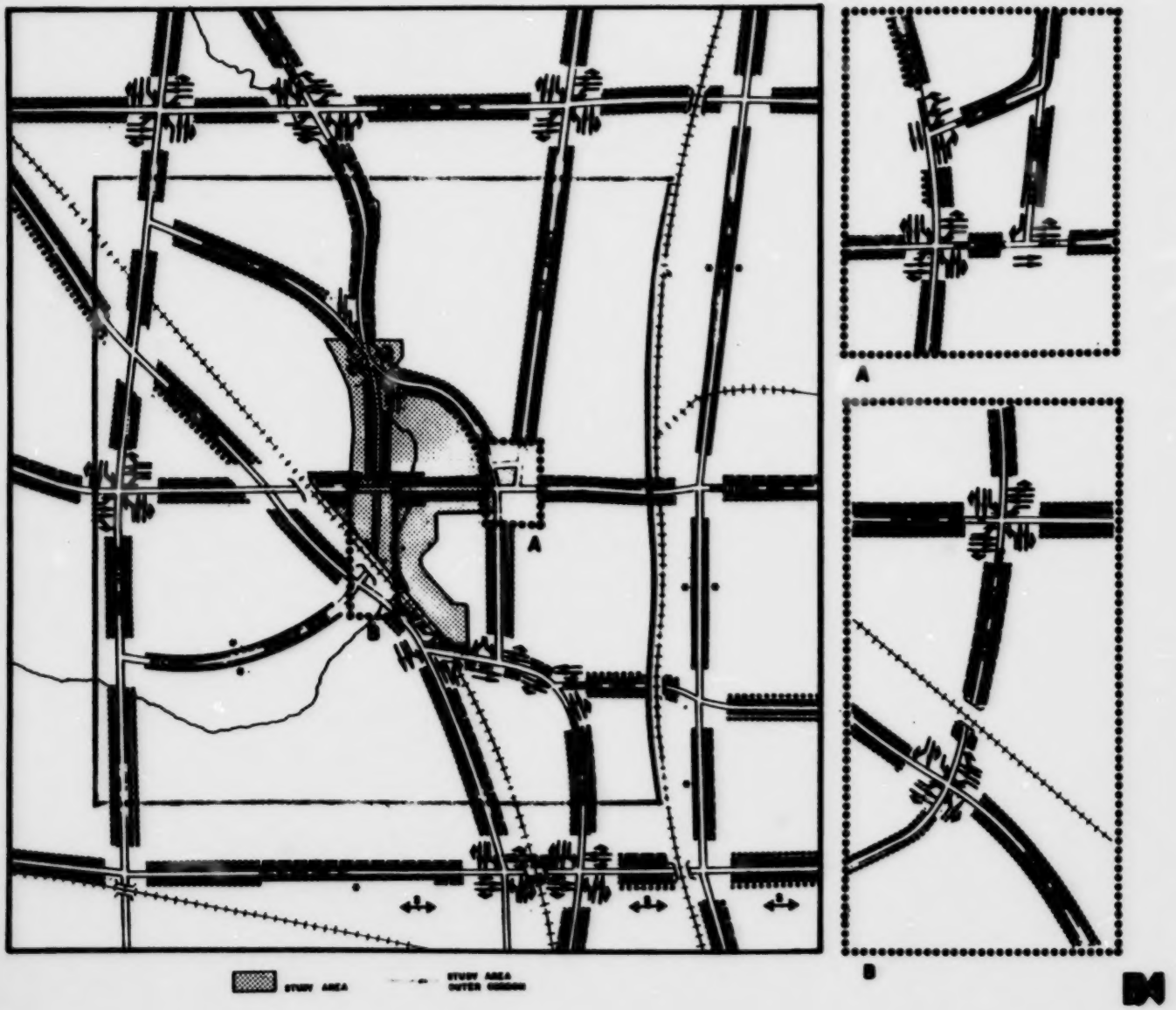
** - Includes some 1987 data

Note:

Link Volumes were derived from the most recent available intersection counts performed by Metropolitan Toronto Department of Roads and Traffic, or the City of York. All volumes are based on 1986 counts, except where noted.

BLACK CREEK FEASIBILITY STUDY

Figure 2



PM PEAK HOUR LANE AVAILABILITY

Note:

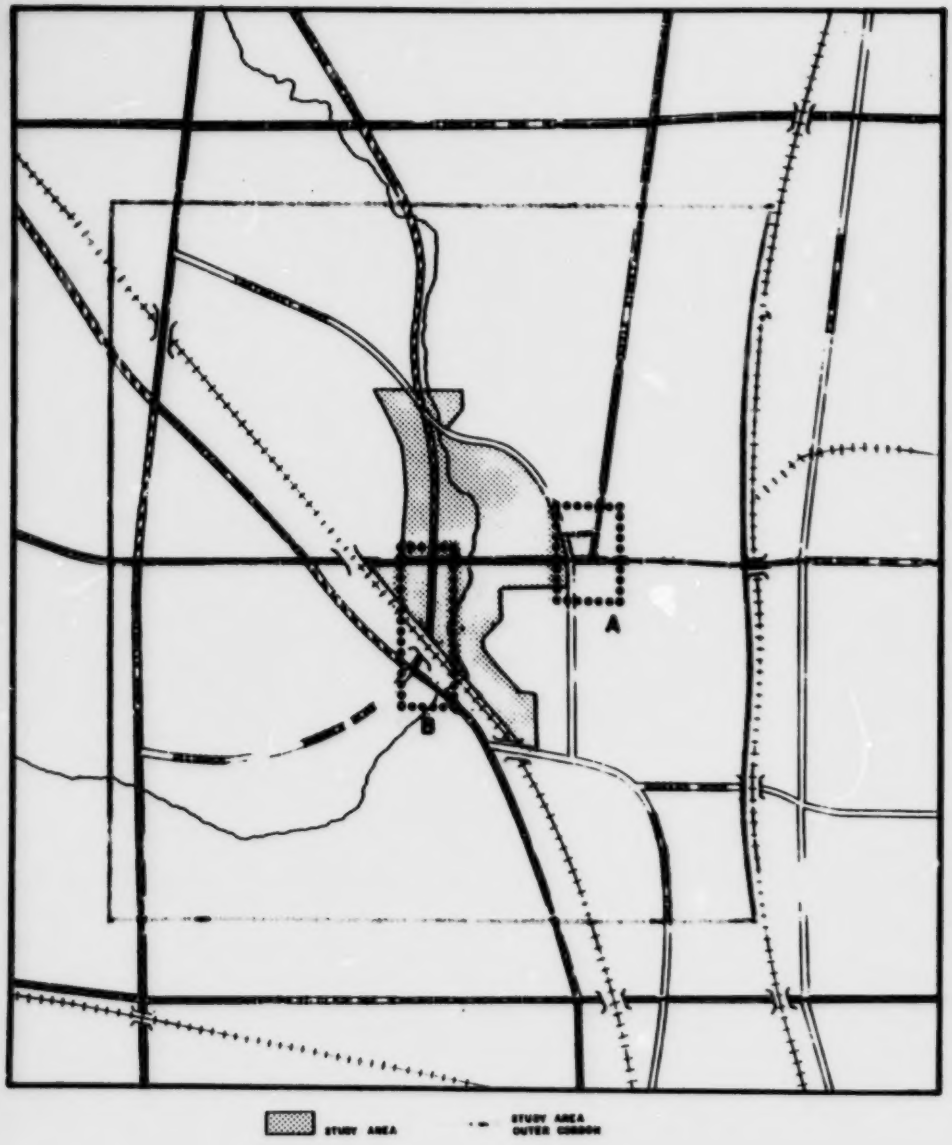
- Reflects the presence of one wide lane accomodating both through traffic and on-street parking.

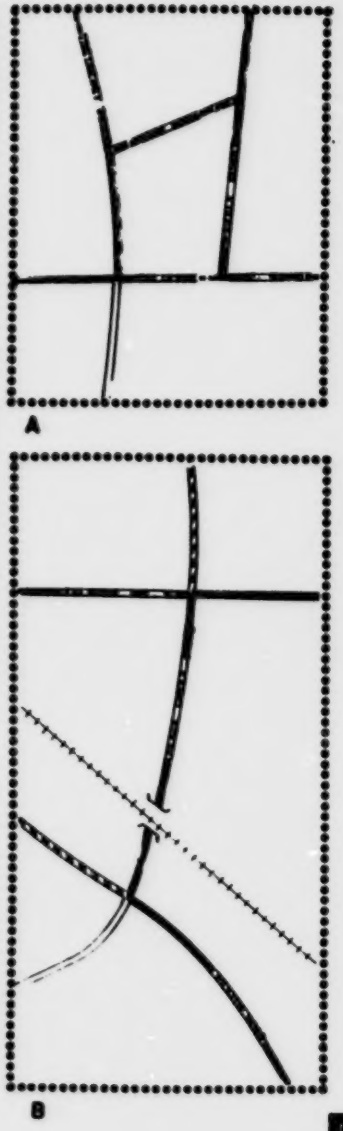
Legend

- Inside Lane
- Curb Lane: No Stopping
- Curb Lane: No Parking
- Curb Lane: Parking Allowed
- Approach Lanes at Key Intersection
- Streetcar Tracks

BLACK CREEK FEASIBILITY STUDY

Figure 3





AM DESIGN HOUR AVERAGE DRIVING SPEEDS (1986)

Note:

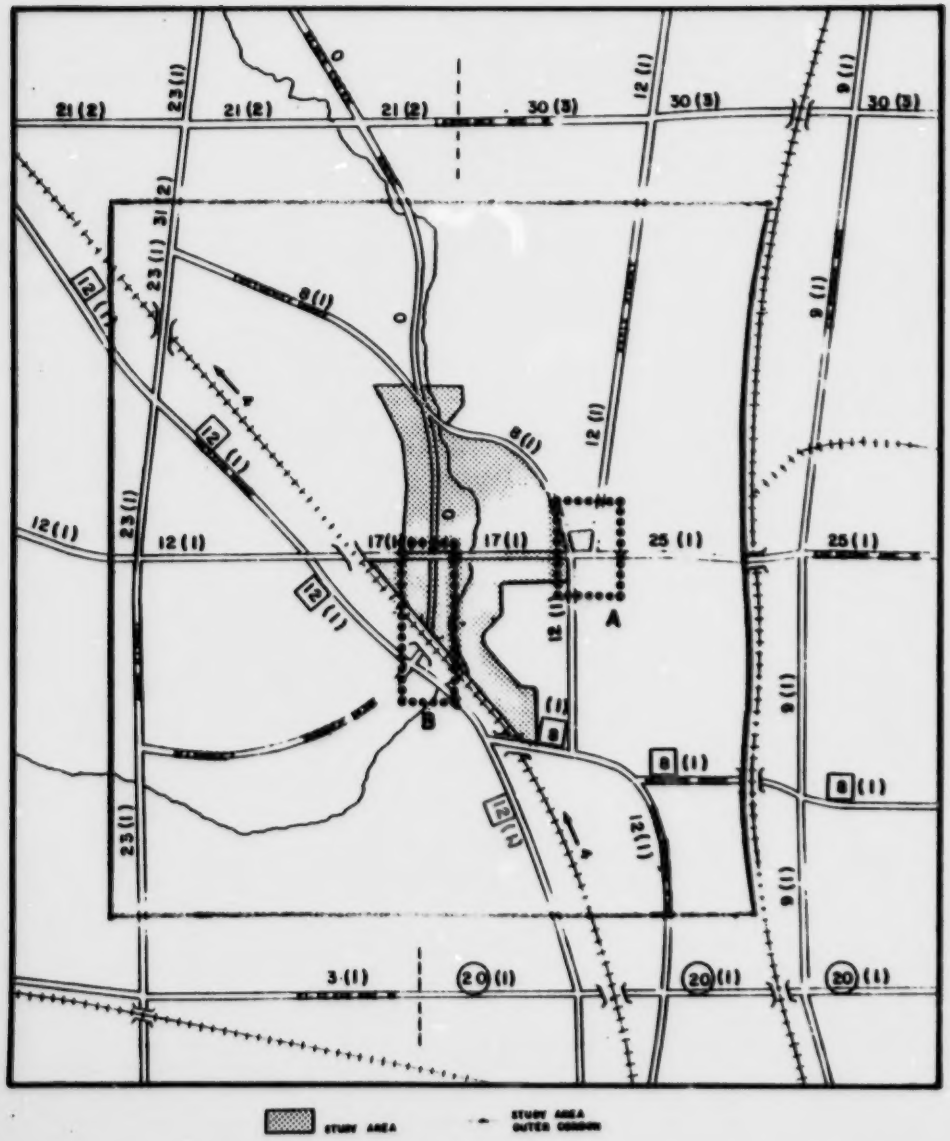
Driving speeds are shown for the peak direction of travel on each link, (Southbound or Eastbound).

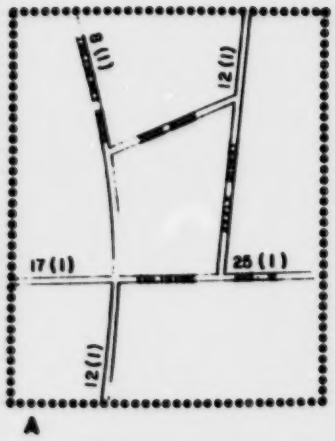
Legend

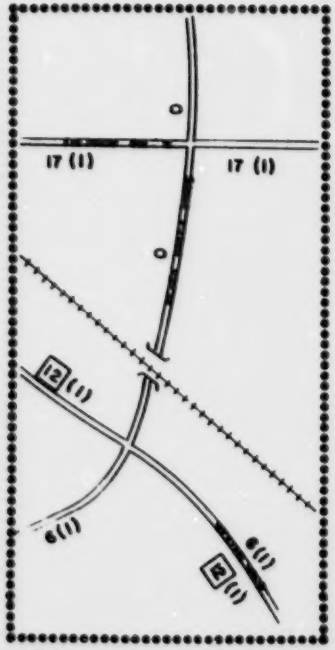
- >=50 km/h
- 40 - 49 km/h
- 30 - 39 km/h
- 20 - 29 km/h
- <=19 km/h

BLACK CREEK FEASIBILITY STUDY

Figure 4







PM PEAK HOUR
SCHEDULED TRANSIT SERVICE

Legend

Scheduled number of vehicles in each direction during PM peak hour:

GO – Buses
(12) – Trolleys
(24) – Streetcars
(0) – Number of routes serving link
0 ⟶ 60 Trains (one-way only)

Note:

Based on "TTC Scheduled Service Summary", October 1986.

BLACK CREEK FEASIBILITY STUDY

Figure 5

APPENDIX C

GEOTECHNICAL INVESTIGATION

GEO-CANADA LTD.
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90 NOLAN CRT., UNIT 18
MARKHAM, ONT.
L3R 4L9
(416) 474-9255

GEOTECHNICAL INVESTIGATION
BLACK CREEK CORRIDOR
FEASIBILITY STUDY
CITY OF YORK

Ref. No. G-86.1208
October 1987

Prepared for:

City of York
c/o Macaulay Shiomi Howson Ltd.
Municipal and Development Planning Services
Suite 604
586 Eglinton Avenue East
Toronto, Ontario
M4P 1P2

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REPORT
ON
GEOTECHNICAL COMPONENT
OF BLACK CREEK CORRIDOR
FEASIBILITY STUDY
CITY OF YORK

1.0 INTRODUCTION

This report deals with the geotechnical component of the multi-disciplinary Black Creek Corridor feasibility study commissioned by the City of York to establish the market potential and development feasibility of an approximately 92 hectare (230 acre) site centered over the Black Creek and extending from Trethewey Drive on the north and east side to Rogers Road and the CN-CP railroad tracks on the south and west side. The findings of this report, together with planning, marketing and transportation studies, will assist the City of York to develop a comprehensive plan for the future long term development of this strategically important area.

The terms of reference for the geotechnical component for this overall study were as follows:

.../...

"Review existing data available on the subsurface conditions in the study area and supplement it with additional information to be obtained by exploratory boreholes.

Identify subsurface conditions that may restrict development in certain areas and define, if possible, the lateral extent of these areas. Of particular concern are areas known or suspected to be landfill sites. In addition to possible foundation problems existing in these areas, the type and level of soil contamination is to be determined."

The key objective of this study was to identify, from the geotechnical engineering stand point, any major physical constraint to development.

Described in this report are the methodology used for the study, the general subsurface conditions, the results of the field and laboratory tests carried out during this study, followed by the interpretation of the data and the conclusions that can be drawn from the study.

.../...

2.0 METHODOLOGY

We have compiled and reviewed the information that already existed from previous geotechnical investigations carried out within the study area. The bulk of the information was gathered and made available to us by the Department of Planning and Economic Development of the City of York, and some of the information has been obtained from M.T.C. In total, the records of eighteen (18) previous investigations were used. A list of these references, designated by letters A to R, is given in Table I, and the areas covered by the studies are shown graphically on Drawing 2 attached.

Information was supplemented by drilling fourteen exploratory boreholes, the locations of which were established in consultation with the Planning Department of the City. In the boreholes, soil samples were recovered and standard penetration tests were performed at close (0.75 m) intervals of depth, and in additon the presence and concentration of methane gas was measured with a portable gas scope.

Representative soil samples were tested in the laboratory to determine their physical properties and, in addition to this, three randomly selected samples of fill material were

chemically analysed to determine the presence of contaminants.

The data obtained by the above methods was then used to compile drawings for a quick overview of the various relevant parameters that could present a constraint for development, including depth of fill, methane gas concentration, high groundwater table, and available foundation options. These are presented on Drawings 2 to 5 inclusive.

3.0 SITE AND GEOLOGY

The study area occupies approximately 92 hectares (230 acres) and comprises the flood plains and the terrace lands on both sides of the Black Creek. It is an approximately 1.5 km long and 250 to 850 m wide strip of land centered nearly over the Black Creek. It extends from the municipal boundary on the north to Rogers Road on the south, and is bounded by the CN-CP railroad tracks at the south-west and Trethewey Drive on the north-east.

The extent of the study area is shown on Drawing 1, together with predominantly vacant areas which are prime targets for potential development or redevelopment within the study area.

.../...

The study area is within the upper reaches of post-glacial Lake Iroquois, which occupied the present Lake Ontario basin during the retreat of the last Pleistocene ice sheet. During this lacustrine environment, deep beds of sand and silt were deposited from the lake and these form the upper portion of the present overburden. The Black Creek runs in a relatively recent valley cut in the Lake Iroquois deposits. Below a thin veneer of Lake Iroquois or recent flood plain deposits, the general soil stratigraphy in the Black Creek valley consists of a complex succession of glacial till and interglacial deposits of sand, silt and clay of the Pleistocene period extending to the Dundas shale bedrock.

The site is located over a deep buried valley which was cut into bedrock, probably by the pre-glacial forerunner of the present Humber River. The floor of this ancient valley, which was filled during the period of glaciation, is at about Elevation 45 to 60 m (150 to 200 ft.), that is at a depth generally greater than 50 m.

4.0 SUMMARIZED SUBSURFACE CONDITIONS

In general, the study area appears to have been extensively filled in the past, as fill ranging in thickness between 1

.../...

and greater than 14 m was found throughout most of the site. Below the fill, the natural soil profile consists of a surface layer of silty sand or sandy silt ranging in thickness from 1 to 10 m, traces of organics, mainly twigs, roots and also occasional shells were encountered in the upper portion of this deposit. Based on the standard penetration test results, the relative density of the stratum can be described as very loose to dense.

Underlying the granular deposit is an extensive depth of clayey silt with sand and occasional gravel. The thickness of this deposit ranges from 18 to greater than 30 m. The undrained shear strength of this material varies considerably over the entire site. However, the consistency of the deposit may be described essentially as firm to hard. Within this deposit, occasional distinct layers of silty sand to sandy silt are present, approximately 1 to 5 m thick. These silty sand layers are generally compact to dense.

The above geologically complex deposit is underlain by a glacial till stratum consisting predominantly of sand, silt and clay. It is generally dense to very dense or hard. None of the boreholes drilled in the study area was extended to bedrock, but from geological records and previous studies it

.../...

is known that the bedrock in the area is a black shale interbedded with siltstone and limestone bands. It belongs to the Georgian Bay formation of the Paleozoic bedrock.

5.0 CONSTRAINTS FOR DEVELOPMENT

Based on the data available to us, the following physical factors were identified as possible constraints for development:

1) Depth of fill.

2) Level of contamination in the fill.

3) High groundwater table.

4) Foundation conditions.

The significance and the effect of these on future development will be discussed briefly below.

5.1 Fill

The fill encountered at the site appears to have been placed without engineering control. Its composition and level of compaction is extremely variable and was found to be

.../...

generally poor. Due to this, the fill is unsuitable to support even the lightest structure without the risk of excessive settlement. The foundations of the structures built at the site will, therefore, have to bypass the fill and will have to be established on the underlying natural soil deposits.

Where the depth of the fill extends 3 m or more, its presence will, therefore, prohibit or make the use of conventional spread footings for the suport of the structures uneconomical. The distribution and the depth of the fill throughout the entire site is summarized on Drawing 3.

5.2 Contaminants

Forming part of our geotechnical study for the above project was the determination of the presence of possible contaminants in previously filled areas and their relevance to the future redevelopment of these areas.

The testing programme for this aspect of the study consisted of the chemical analysis of fill samples obtained at shallow depth (0.75 m/2.5 ft.) and some randomly selected samples at greater depths (1.5 m/5.0 ft. and 4.0 m/13.0 ft.). The

.../...

parameters analyzed were oil and grease; arsenic; and metals (e.g. lead, cadmium, mercury, etc.).

The test results are summarized and attached as Table 2 together with Ministry of Environment clean-up guidelines for soils as a criteria for proposed land redevelopment.

From the test results available to date, it appears that the level of contaminants present in the fill that was found throughout the study area should not impose restrictions on development or redevelopment potential in much of the Corridor. Contaminant levels in most of the tested areas are well below the recommended guideline levels as we understand them, but depending on the type and nature of the future development, further site specific testing may be required at the time of design.

Exception to the above was found only in the Hyde Avenue industrial area where higher levels of metal contamination were expected and also, more importantly, in the Coronation Park area. At the latter site, out of the five boreholes drilled four boreholes have indicated contamination levels that exceed the MOE guidelines for even the present park/public open space usage. In these boreholes, one or

.../...

more of the contaminants listed below exceeded the recommended guideline levels: oil and grease; arsenic, copper; chromium; lead and zinc.

The findings are presently under review by the Ministry of Environment whose guidance was requested to determine what remedial measures, if any, should be taken.

The presence of methane gas is another possible constraint for development as the underground portions of the buildings will have to be protected from the migration of the gas which could cause explosive conditions. Thus, where excessive amounts of methane gas are present, i.e. greater than 5%, it may be more prudent to eliminate any underground construction and have buildings with above grade structures only. Alternatively, the fill and any natural organic deposit that produces gas could be removed, or systems to collect and extract the gas from the ground before it can enter the building can be installed. These alternative measures would make the construction of underground space more expensive and, depending on the relative depth of the fill, either one or the other method would be more cost effective.

.../...

5.3 Groundwater

Groundwater could yet be another constraint for development as construction of underground structures will have to cope with groundwater flow. Not only the temporary excavations for the buildings and utilities, but also the permanent structures such as basements or underground parking garages would require dewatering systems. Measures to overcome problems associated with groundwater are, however, available but would add to the cost of development.

The general depths to the groundwater table are summarized on Drawing 4.

5.4 Foundation Conditions

The type and cost of foundation could be an economical constraint on development.

Generally, greatest economy is achieved if the structure can be supported on conventional shallow spread footings placed at shallow depth below the underside of the structure. This depth is normally 1.2 m below grade for buildings without basement and less than 1 m below the basement level of structures with underground space. Where a suitable bearing

.../...

stratum at this level is not available, the excavtions for the footings will have to be extended deeper.

As a general rule, where excavations have to be made deeper than 2 m below the underside of the structure, it is more economical to support the buildings on deep foundations consisting of caissons or driven piles. Caissons are drilled piles for which holes are drilled mechanically to the surface of a suitable bearing stratum, and then the holes are filled with concrete. Caissons are generally economical where a very dense or hard bearing stratum is at a sufficiently shallow depth and where this bearing stratum has a relatively high bearing capacity to support high concentrated structural loads on a relatively small diameter caisson. Where these conditions are not present or where the installation of the caissons will likely encounter problems (e.g. caving or squeezing ground conditions), driven piles will have to be considered. Timber, steel-tube or steel-H piles are the most common pile types used in Ontario. Generally, when suitable conditions exist for either type of deep foundation, caissons are usually more economical.

The capacity of the soil to support the various foundation units significantly affects the economy of construction.

.../...

As a rule of thumb, with an allowable design bearing capacity of 0.2 MPa (2 tons per square foot) a four storey structure, and with 0.3 MPa (3 tsf) a six storey structure could be supported on economical sized spread footings. Similarly, for deep foundations and assuming 4 piles for each column, 300 kN (33 tons) capacity piles could support a two to three storey structure; 500 kN (55 tons) capacity piles a four storey structure; and 1000 kN (110 tons) capacity piles could support an eight to nine storey building. Much taller buildings could also be supported on the same capacity piles by increasing the number of piles under a column (this, however, will require larger pile caps resulting in increased cost) or by increasing the length of the piles. It is estimated that at current (1987) construction prices the provision of additional piles would increase the cost of additional floor area by about 5 to 10%.

It is further expected that the safe load carrying capacity of a single pile unit could be increased possibly by as much as 50% over the above indicated theoretical tentative values if the pile capacity is determined in the field by full scale load tests.

The foundation conditions and available options throughout the site are summarized on Drawing 5.

.../...

6.0 GUIDELINES FOR DEVELOPMENT

The purpose of this section is to present an overview of the subsurface and foundation conditions and to enumerate the various constraints present in certain areas and the effect of these on the construction of buildings, and thus to lay down guidelines for possible future development in the reference areas identified on Drawing No. 1.

Area A1

This area is underlain by up to 14 m of fill. In the fill high levels of methane gas (up to 38%) were reported and the chemical analyses of randomly selected samples indicate high levels of contaminants that exceed the apparent Ministry of Environment standards for even the present park/public open space usage.

Presently, MOE has been asked to carry out further studies to determine the extent of the contamination and to advise what measures, if any, are required to eliminate potential health hazards. It is expected that as a result of this further study and the fullfilment of MOE recommendations the area should become suitable for redevelopment for any purpose,

.../...

provided that the development does not call for extensive excavations and/or the off-site disposal of the excavated materials. Depending on the level of contamination, the excavated material may have to be hauled to special MOE approved disposal sites resulting in potentially considerable additional cost.

Structures in this area will have to be supported on deep foundations. As the installation of caissons would result in large quantities of contaminated soils being brought to the surface and the disposal of these would present a problem, driven steel-H piles should be used for structural support. The length of the piles is estimated to be greater than 20 m with load carrying capacities of the order of 500 to 600 kN. These would be suitable for the support of four to five storey structures. Taller structures could also be planned, but these would require either longer piles (in excess of 30 m) or a larger number of piles per column, both adding to the cost of construction, as discussed in Section 5.4 of this report.

The structures should have no underground space to avoid the need of excavation and the disposal of contaminated soils on

.../...

one hand, and to minimize the risk of methane gas leakage into the buildings on the other hand. Unless the structures are elevated above grade on stilts, some kind of protective measure will be required to cope with the methane gas migration problem (e.g. impervious membrane, ventilation, etc.).

Area A2

This area is underlain by fill ranging in depth between 1 and greater than 6 m. High levels of methane gas (in excess of 60%) were measured, but the fill appears to be free of contaminants. The measured levels of contaminants are well within MOE guidelines for land redevelopment. The groundwater level was recorded 4 to 5 m below ground surface.

Due to the high levels of measured methane gas concentrations, it is preferable that buildings in this area be constructed entirely above grade without basement space. The problem of methane gas could, however, be overcome by either totally removing the fill and possible other natural organic deposits that produce gas, or by installing a gas collector system together with gas barriers around and under

.../...

the structures. With any of these measures, buildings could then be constructed with underground spaces. The cost of these protective measures, however, is estimated to be only a small percentage of the overall construction cost of the buildings. Underground structures deeper than 4 m will also require permanent dewatering systems or will have to be designed watertight.

For the structural support of the buildings, driven piles would be the most suitable. Spread footings are not suitable because of the great depth of the fill and the high groundwater table. Caissons too would be unsuitable due to the low bearing capacity of the soils within economical depth and the anticipated installation problems through unstable, caving soil deposits. Light, two to three storey structures could be supported on 12 to 15 m long treated timber or steel tube piles, and eight to ten storey structures could be supported on about 30 m long steel-H piles. Taller structures could also be built by increasing the length or the number of the piles.

.../...

Areas A3 to A9

No information about the subsurface conditions is available from these areas. Since these areas are already built-up, it was felt that no extensive fill deposits should be expected here. It is, therefore, speculated that the natural soil deposits would be encountered near the ground surface and would consist of very stiff to hard silty clay deposits. Should this be the case, then up to six storey structures could possibly be supported on spread footings and heavier structures may have to be founded on deep foundations, possibly caissons. Due to the anticipated absence of deep or contaminated fills and a low groundwater table, one would not expect problems with underground structures in these areas.

Areas B1 and B2

Present and previous borings carried out in this area indicate 3 to 12 m of fill overlying the stratified natural soil deposits of silty sand, sandy silt and clayey silt. In the single borehole drilled in this area during the present investigation methane gas levels up to 21% were measured. Chemical analysis of a fill sample indicates low levels of contaminants which are within safe limits for development.

.../...

The groundwater level was recorded at depths between 1.8 and 4 m.

The great depth of fill, the relatively high groundwater level, and the presence of methane gas represent the constraints for development. The conditions are similar to Area A2, and for comments on development potential, reference should be made to that area.

Areas B3 to B6

In this existing industrial area, on Hyde Avenue, fills between 2 and greater than 6 m were encountered. In the fill, low levels of methane gas (less than 0.5%), but high levels of contaminants (heavy metals) were recorded. The water level was observed between 2 and 3 m below ground surface.

It is presently unknown how widespread the contaminants are, but it is expected that heavy metal contaminants will be found in the soil throughout this area. For the redevelopment of this area, some kind of clean-up may, therefore, be required and MOE should be consulted on

.../...

possible clean-up measures that may be necessary.

Where the fill is shallow, less than 2 m, shallow spread footings could be used with 0.2 MPa bearing pressure. With this bearing pressure, possibly up to four storey high structures could be erected economically. Where the fill is deeper, or for heavier structures, driven piles can be used. On 12 m long timber or steel-tube piles with tentative load carrying capacities of 300 to 500 kN up to four storey high structures could be supported. Taller structures will require longer (approximately 30 m) piles with 1000 kN or higher capacity. Our comments on the possible cost implications of this are discussed in Section 5.4.

Structures could have a maximum one level of underground space without special drainage systems, but even single level basements will require protective measures to eliminate methane gas seepage into the buildings.

The above comments are applicable to development in the low lying areas. More favourable conditions may possibly exist in areas located on higher ground to the south.

.../...

Areas B7 to B10

Conditions in this area are unknown, but they are expected to be similar to those discussed for Areas A3 to A9. For tentative guidelines, reference should be made to those areas.

Area C1

No boreholes were drilled in this area during the present investigation, but from previous studies it is expected that the area is underlain by a 1 to 5 m thick layer of fill. There is no information on the presence of methane gas or contaminants in the fill. The water table was recorded at a depth of 3.6 to 12 m.

Based on the above information, it appears that shallow spread footings could be used below the fill with tentative bearing pressures up to 0.3 MPa. This is suitable for the support of up to six storey structures. Where the fill is deeper or if heavier structures are contemplated, these could possibly be supported on caissons at a depth of 5 to 6 m with a tentative bearing pressure of 1 MPa. Alternatively, taller buildings could be supported on 30 m long driven steel-H

.../...

piles with a tentative load carrying capacity of 1000 kN or more.

Area D1

Up to 4 m of fill can be expected in this area, but the fill appears to be clean earth fill with no methane gas or contaminants. The water level appears to be at shallow depth (0.5 m).

Due to the high water level and the depth of fill, shallow spread footings may not be a good choice of foundation as excavations to reach the surface of the natural soil deposits may require extensive dewatering measures. Deep foundations, consisting of 12 m long timber or steel-tube piles, could be used for the support of up to three storey high structures while longer (30 m) and higher capacity (1000 kN) steel-H piles could be used for taller structures at some additional cost as discussed in Section 5.4.

Due to the high water level basements will require special drainage systems.

.../...

Areas D2 and D3

This area appears to be underlain by shallow or no fill and groundwater levels were observed at a depth of about 2 m.

The use of shallow spread footings should be feasible below the fill with tentative bearing pressures of 0.1 to 0.2 MPa. With these bearing pressures, up to four storey high structures could be supported on economical size footings. Taller structures should be supported on driven piles. 30 m long steel-H piles are estimated to have a load carrying capacity of 1000 kN.

As methane gas was found in some of the boreholes which were drilled for the police station presently under construction immediately to the east, some measures to prevent the migration of methane gas into the buildings may be necessary.

7.0 FURTHER ANALYSIS

The guidelines presented in Section 6.0 of the report are based on limited information obtained during the present investigation and the previous studies carried out in the area. At the time of design and consideration of individual

.../...

development proposals, site specific investigations will be required to refine these guidelines and to establish the foundation conditions and other physical constraints more accurately. This should include additional deep boreholes together with the monitoring of methane gas and contaminant concentration levels.

GEO-CANADA LTD.

Ivan P. Lieszkowszky, P.Eng.

IPL:esp

ENCLOSURES

Ref. No. G-86.1208

TABLE 1

LIST OF INFORMATION SOURCES

REF.	CONSULTANT OR AGENCY	REPORT #	DATE	PURPOSE OF INVESTIGATION
A	Bruce Brown Ass.	81897	Apr. 1981	Field House
B	Can. Inspect. and Testing Co.	8-97	May 1955	Bridge
C	Dept. of High.	65-F-40	Apr. 1965	Ext. of HWY 400
D	J.T. Donald	T68-300	Jan. 1968	Prop. Office Bldg.
E	J.T. Donald	T81-1346	Mar. 1981	Add. to Garage
F	Golder & Assoc.	---	Feb. 1965	Bridge
G	Golder & Assoc.	64001	Mar. 1964	Underpass
H	MTC A	WP337602	---	Baseball Field
I	MTC B	WP337613	---	CPR & CNR Bridges
J	MTC C	WP337619	---	Retaining Wall
K	MTC D	---	---	Bridge
L	MTC E	WP337605	---	NW Metro Arterial
M	Sarafinchin	T509.1	Aug. 1986	Police Station
N	Trow Assoc.	J6762/6147	May 1972	Trunk Sewer
O	Trow Assoc.	J5682	May 1970	Storm Tank
P	Trow Assoc.	J4796	Dec. 1968	Relief Sewer
Q	Trow Assoc.	J5793	July 1970	Bridge
R	Warnock & Hersey	2301427	May 1973	42" Dia. Watermain

Ref. No. G-86.1208

CITY OF YORK
BLACK CREEK CORRIDOR STUDY

CHEMICAL ANALYSIS

TABLE 2

Contaminant	Borehole / Sample No. 1/1 (2.5')	4/1 (2.5')	5/1 (2.5')	6/1 (2.5')	7/1 (2.5')	8/1 (2.5')	10/1 (2.5')	11/1 (2.5')	12/1 (2.5')	6/2 (5')	8/5 (13')	Criteria for Redevelopment: Residential / Parkland	Commercial / Industrial
pH	8.3	7.8	7.6	7.6	7.7	7.3	7.9	8.2	8.1	7.9	7.9	6 - 8	6 - 8
Oil & Grease ppm	1570	658	1080	766	786	16940**	4500	376	130	1780	4340	10000	10000
Arsenic ppm	15	5	5	2	<1	5	<1	1	2	11	>30*	25	50
Aqua-Regia Soluble Metals, ppm													
Cadmium	2.6	<0.5	<0.5	<0.5	3	<1	<0.2	<0.1	<0.1	2.1	1.6	5	5
Chromium	2.4	17	16	11	25	2147**	11	10	10	8.5	1.1	1000	1000
Copper	1340**	287	57	96	149	63	10	9	12	55	120**	300	300
Iron	51700	-	-	-	-	-	-	-	-	1470	21154	-	-
Lead	550*	112	261	58	792*	7368**	12	8	20	2170**	670*	500	1000
Mercury	-	0.12	0.12	0.09	0.29	0.16	0.09	0.14	0.09	-	-	1	2
Nickel	110	28	26	19	50	29	21	19	19	36	40	200	200
Zinc	2100**	1303**	296	498	534	1616**	39	34	61	1200**	730	500	500

* Values exceeding criteria for residential & parkland development.

** Values exceeding criteria for any type of development.

PROJECT No. G-86.1208 **LOG OF BOREHOLE 1**

CLIENT: City of York
PROJECT: Black Creek Corridor Study
LOCATION: City of York
DATUM ELEVATION:

DRILLING DATA
Method: Augering
Diameter: 100 mm
Date: June 23, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE: DESCRIPTION	SYMBOL	SAMPLE: NUMBER	TYPE	'N' BLS /0.3	GROUND WATER	REMARKS: Methane Gas Concentration %
0.0	Ground Surface						
	FILL heterogeneous mixture of sand, silt, clay some gravel cinders tile wood pieces of metal, etc. very loose to loose						
			1	SS	8		0
			2	SS	3		0
						W.L. 2.1 m	
			3	SS	2		0
			4	SS	8		0.1
			5	SS	10		0.3
			6	SS	7		0
			7	SS	8		0
			8	SS	9		0
6.5	**END OF BOREHOLE**						

PROJECT No. G-86.1208 **LOG OF BOREHOLE 2**

CLIENT: City of York
PROJECT: Black Creek Corridor Study
LOCATION: City of York
DATUM ELEVATION:

DRILLING DATA
Method: Augering
Diameter: 100 mm
Date: June 25, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE: DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE: NUMBER	TYPE	'N' BLS/0.3	GROUND WATER	REMARKS: Methane Gas Concentration %
0.0	**FILL** ash cinders topsoil loose		1	SS	48		
			2	SS	4		0.2
			3	SS	9	W.L. 1.9 m	0.1
2.0	**SILTY SAND** some gravel wet compact		4	SS	22		0.1
3.0	**SILTY CLAY** trace sand low plasticity grey very stiff to hard		5	SS	26		0
			6	SS	32		0.5
			7	SS	45		0.3
			8	SS	18		0.2
			9	AS			
			10	SS	22		
6.5	**END OF BOREHOLE**						

PROJECT No. G-86.1208

LOG OF BOREHOLE 3

CLIENT: City of York

PROJECT: Black Creek Corridor Study

LOCATION: City of York

DATUM ELEVATION:

DRILLING DATA

Method: Augering

Diameter: 100 mm

Date: June 23, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE: DESCRIPTION	SYMBOL	SAMPLE: NUMBER	TYPE	'N' BLS /0.3	GROUND WATER	REMARKS
	Ground Surface						Methane Gas Concentration %
0.0	**FILL** heterogeneous mixture of sand, silt clay, gravel with pieces of asphalt cinder glass wire very loose to compact		1	SS	34		
			2	SS	17		0
			3	SS	8		0
			3A	SS			
						W.L. 2.0 m	
			4	SS	5		0
			5	SS	3		0
			6	SS	6		0.5
			7	SS	5		0.9
			8	SS	14		0.2
			9	SS	30		0
6.5	**END OF BOREHOLE**						

PROJECT No. G-86.1208 **LOG OF BOREHOLE 4**

CLIENT: City of York
PROJECT: Black Creek Corridor Study
LOCATION: City of York
DATUM ELEVATION:

DRILLING DATA
Method: Augering
Diameter: 100 mm
Date: June 24, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE: DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE: NUMBER	SAMPLE: TYPE	SAMPLE: 'N' BLS /0.3	GROUND WATER	REMARKS
							Methane Gas Concentration %
0.0	50 mm topsoil						
	FILL						
	heterogeneous mixture of silty clay fine sand ashes cinder slag glass wood rubber tile, etc. very loose to compact		1	SS	10		0
			2	SS	2		0
			3	SS	5		0
			4	SS	14		2.4
			5	SS	8		8.0
			6	SS	14		4.0
			7	SS	7		8.0
			8	SS	11		13.0
6.5	**END OF BOREHOLE**					DRY	

PROJECT No. G-86.1208 LOG OF BOREHOLE 5

CLIENT: City of York

PROJECT: Black Creek Corridor Study

LOCATION: City of York

DATUM ELEVATION:

DRILLING DATA

Method: Augering

Diameter: 100 mm

Date: June 24, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE — DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE 'N' BLS/0.3	GROUND WATER	REMARKS
0.0	100 mm Topsoil						Methane Gas Concentration %
	FILL heterogeneous mixture of silt clay sand with pieces of asphalt concrete tile paper glass wood cinders, etc. loose		1	SS	5		0
			2	SS	4		3.4
			3	SS	5		0.4
			4	SS	5		2.4
			5	SS	7		1.3
			6	AS			
			7	SS	6		5.0
			8	SS	11		1.2
6.5	**END OF BOREHOLE**					DRY	

STRATAMAP 87

LOG OF BOREHOLE 6

PROJECT No. C-86.1208

CLIENT: City of York

PROJECT: Black Creek Corridor Study

LOCATION: City of York

DATUM ELEVATION:

DRILLING DATA

Method: Augering

Diameter: 100 mm

Date: June 24, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE — DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE 'N' BLS /0.3	GROUND WATER	REMARKS
0.0	50 mm Topsoil						Methane Gas Concentration %
	FILL						
	clayey silt with slag glass paper wood metal, etc. loose to compact		1	SS	7		20
			2	SS	14		38
			3	SS	18		37
			4	SS	6		36
			5	AS			
			6	SS	4		37
			7	AS			
			8	SS	15		37
			9	AS			
			10	SS	4		36
			11	AS			
			12	SS	15		30
						DRY	
6.5	**END OF BOREHOLE**						

PROJECT No. G-86.1203 . . LOG OF BOREHOLE 7

CLIENT: City of York
PROJECT: Black Creek Corridor Study
LOCATION: City of York
DATUM ELEVATION:

DRILLING DATA
Method: Augering
Diameter: 100 mm
Date: June 24, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE: DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE: NUMBER	TYPE	'N' BLS/0.3	GROUND WATER	REMARKS
0.0	75 mm Topsoil						Methane Gas Concentration %
	FILL						
	silty clay with ashes cinder wood tile glass pieces of metal loose to compact		1	SS	4		0.13
			2	SS	4		0.04
			3	SS	4		0
			4	SS	6		0
			5	SS	12		0
			6	SS	14		0
			7	SS	21		0
			8	SS	27		0
6.5	**END OF BOREHOLE**					DRY	

LOG OF BOREHOLE 8

PROJECT No. G-86-1208

CLIENT: City of York
PROJECT: Black Creek Corridor Study
LOCATION: City of York
DATUM ELEVATION:

DRILLING DATA
Method: Augering
Diameter: 100 mm
Date: June 24, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE — DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE 'N' BLS /0.3	GROUND WATER	REMARKS — Methane Gas Concentration %
0.0	**FILL** heterogeneous mixture of silt clay sand slag paper rubber glass, etc. very loose to compact						
			1	SS	6		0
			2	SS	11		0
			3	SS	4		0
			4	SS	9		0.1
			5	SS	3		0
			6	SS	16		0.1
5.0	**SILTY CLAY TILL** grey hard		7	SS	42		0
			8	SS	49	DRY	
6.5	**END OF BOREHOLE**						

PROJECT No. G-86.1208 **LOG OF BOREHOLE 9**

CLIENT: City of York
PROJECT: Black Creek Corridor Study
LOCATION: City of York
DATUM ELEVATION:

DRILLING DATA
Method: Augering
Diameter: 100 mm
Date: June 23, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE: DESCRIPTION	SYMBOL	SAMPLE: NUMBER	TYPE	'N' BLS/0.3	GROUND WATER	REMARKS
	Ground Surface						Methane Gas Concentration %
0.0	**FINE SAND AND SILT** trace of organic matter brown/gray/green mottled moist compact to loose		1	SS	13		0
			2	SS	17		0
			3	SS	6		0
						W. L. 3.0	
3.0	**SILTY CLAY** some sand grey very stiff		4	SS	15		0
			5	SS	14		5
			6	SS	20		3.2
			7	SS	22		3.8
			8	SS	17		3.2
6.5	**END OF BOREHOLE**						

LOG OF BOREHOLE 10

PROJECT No. G-86-1208

CLIENT: City of York

PROJECT: Black Creek Corridor Study

LOCATION: City of York

DATUM ELEVATION:

DRILLING DATA

Method: Augering

Diameter: 100 mm

Date: June 23, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE: DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE: NUMBER	TYPE	'N' BLS /0.3	GROUND WATER	REMARKS
0.0	**FILL** heterogeneous mixture of sand gravel silty clay wood chips wet black to grey loose to compact					W. L. 0.5 m	Methane Gas Concentration %
			1	SS	11		0.1
			2	SS	18		0.1
			3	SS	7		0.1
			4	SS	11		8.0
			5	SS	15		3.2
			6	SS	16		2.0
			7	SS	7		2.0
			8	SS	18		0.1
6.5	**END OF BOREHOLE**						

PROJECT No. G-86-1208 . LOG OF BOREHOLE 11

CLIENT: City of York

PROJECT: Black Creek Corridor Study

LOCATION: City of York

DATUM ELEVATION:

DRILLING DATA

Method: Augering

Diameter: 100 mm

Date: June 24, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE: DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE: NUMBER	SAMPLE: TYPE	SAMPLE: N' BLS/0.3	GROUND WATER	REMARKS: Methane Gas Concentration %
0.0	100 mm Topsoil						
	FILL predominantly silty clay mixed with some sand gravel pieces of asphalt wood brick compact		1	SS	9		0
			2	SS	10		55
			3	SS	55/	0.05 m	25
			4	SS	49		67
			5	SS	18		32
						W.L. 4.5 m	
			6	SS	20		27
			7	SS	17		28
			8	SS	12		40
6.5	**END OF BOREHOLE**						

PROJECT No. G-86.1208

LOG OF BOREHOLE 12

CLIENT: City of York

PROJECT: Black Creek Corridor Study

LOCATION: City of York

DATUM ELEVATION:

DRILLING DATA

Method: Augering

Diameter: 100 mm

Date: June 25, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE: DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE: NUMBER	SAMPLE: TYPE	SAMPLE: 'N' BLS /0.3	GROUND WATER	REMARKS
0.0	75 mm Topsoil **FILL** heterogeneous mixture of silty clay sand gravel topsoil some pieces of concrete brick brown/grey wet below 3.0 m loose to compact						Methane Gas Concentration %
			1	SS	21		0
			2	SS	17		7
			3	SS	21		15
						▼ W.L. 2.5 m	
			4	SS	30		13
			5	SS	20		7
			6	SS	7		21
			7	SS	12		17
			8	SS	10		16
6.5	**END OF BOREHOLE**						

LOG OF BOREHOLE 13

PROJECT No. G-86-1208

CLIENT: City of York

PROJECT: Black Creek Corridor Study

LOCATION: City of York

DATUM ELEVATION:

DRILLING DATA

Method: Augering

Diameter: 100 mm

Date: June 25, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE — DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE 'N' BLS /0.3	GROUND WATER	REMARKS
0.0	500 mm Granular Fill **FINE SAND AND SILT** wet compact to loose					▼ W.L	0.3 m
			1	SS	14		No methane gas detected in this borehole.
			2	SS	6		
	brown / grey		3	SS	5		
2.8	**SILTY CLAY** interbedded with thin sand and silt seams wet grey compact to loose		4	SS	15		
			5	SS	19		
			6	SS	14		
			7	SS	9		
			8	SS	9		
6.5	**END OF BOREHOLE**						

PROJECT No. C-86-1208

LOG OF BOREHOLE 14

CLIENT: City of York

PROJECT: Black Creek Corridor Study

LOCATION: City of York

DATUM ELEVATION:

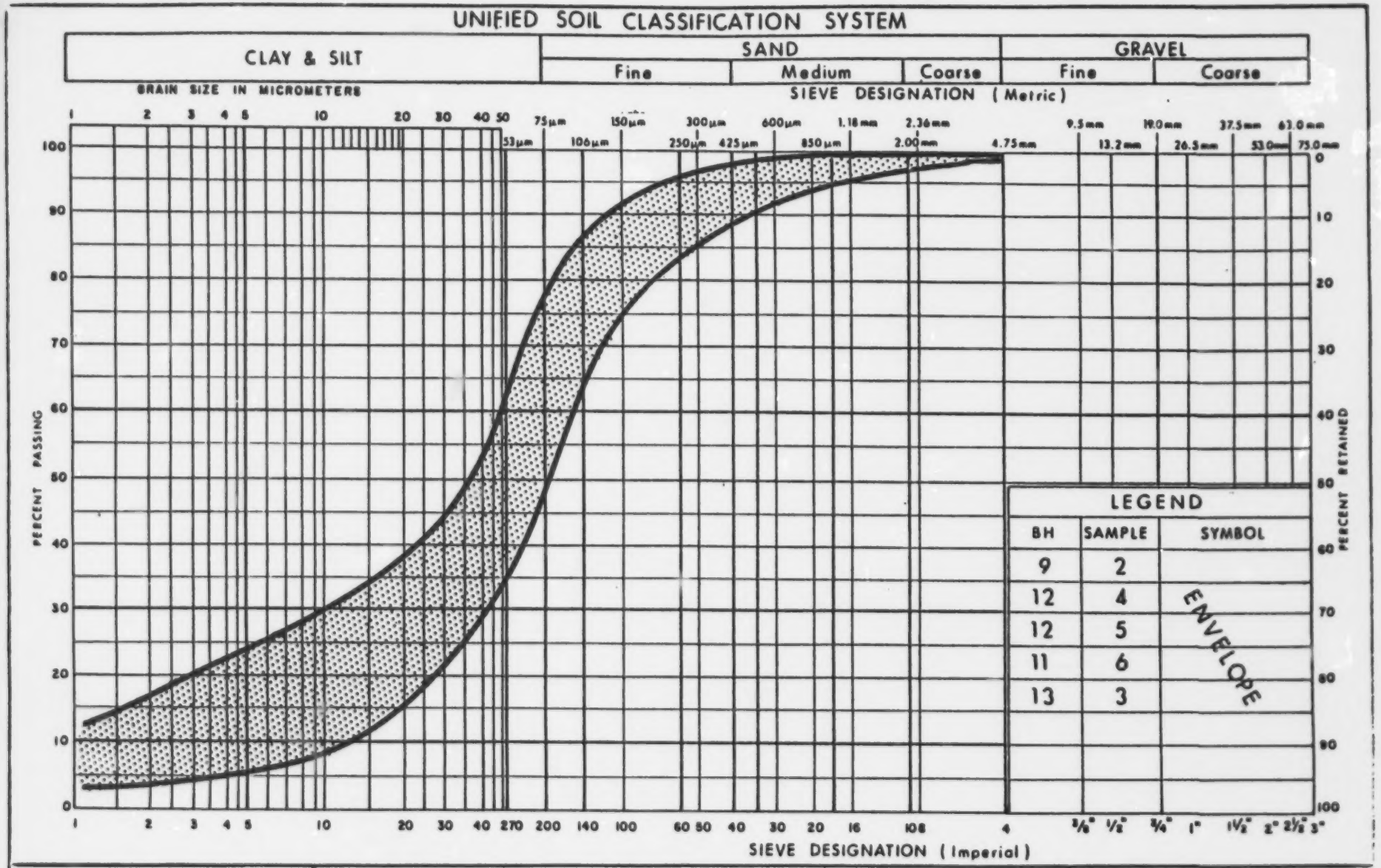
DRILLING DATA

Method: Augering

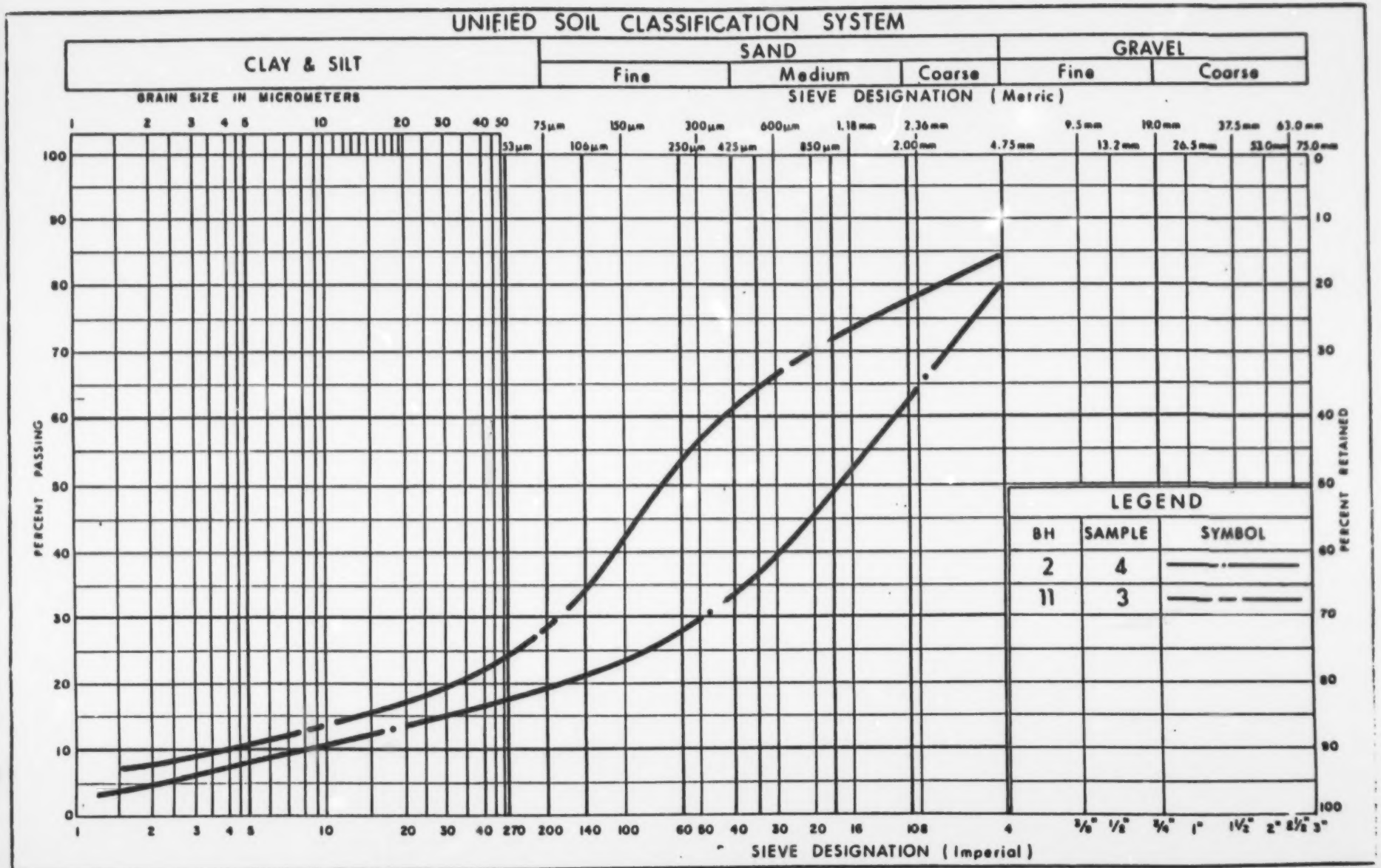
Diameter: 100 mm

Date: June 24, 1987

(m) ELEV. / DEPTH.	SOIL PROFILE — DESCRIPTION (Ground Surface)	SYMBOL	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE N' BLS /0.3	GROUND WATER	REMARKS
0.0	125 mm Topsoil 100 mm Granular Fill **FILL** sand some silt occasional pieces of glass wood brown compact to loose						No methane gas detected in this Borehole.
			1	SS	18		
			2	SS	19		
						▽	Hole caved in at 2.2 m wet.
	moist wet		3	SS	12		
			4	SS	13		
4.0	**SILTY SAND** trace gravel organic matter grey compact		5	SS	9		
			6	SS	20		
			7	SS	16		
			8	AS			
			9	SS	11		
0.5	**END OF BOREHOLE**						

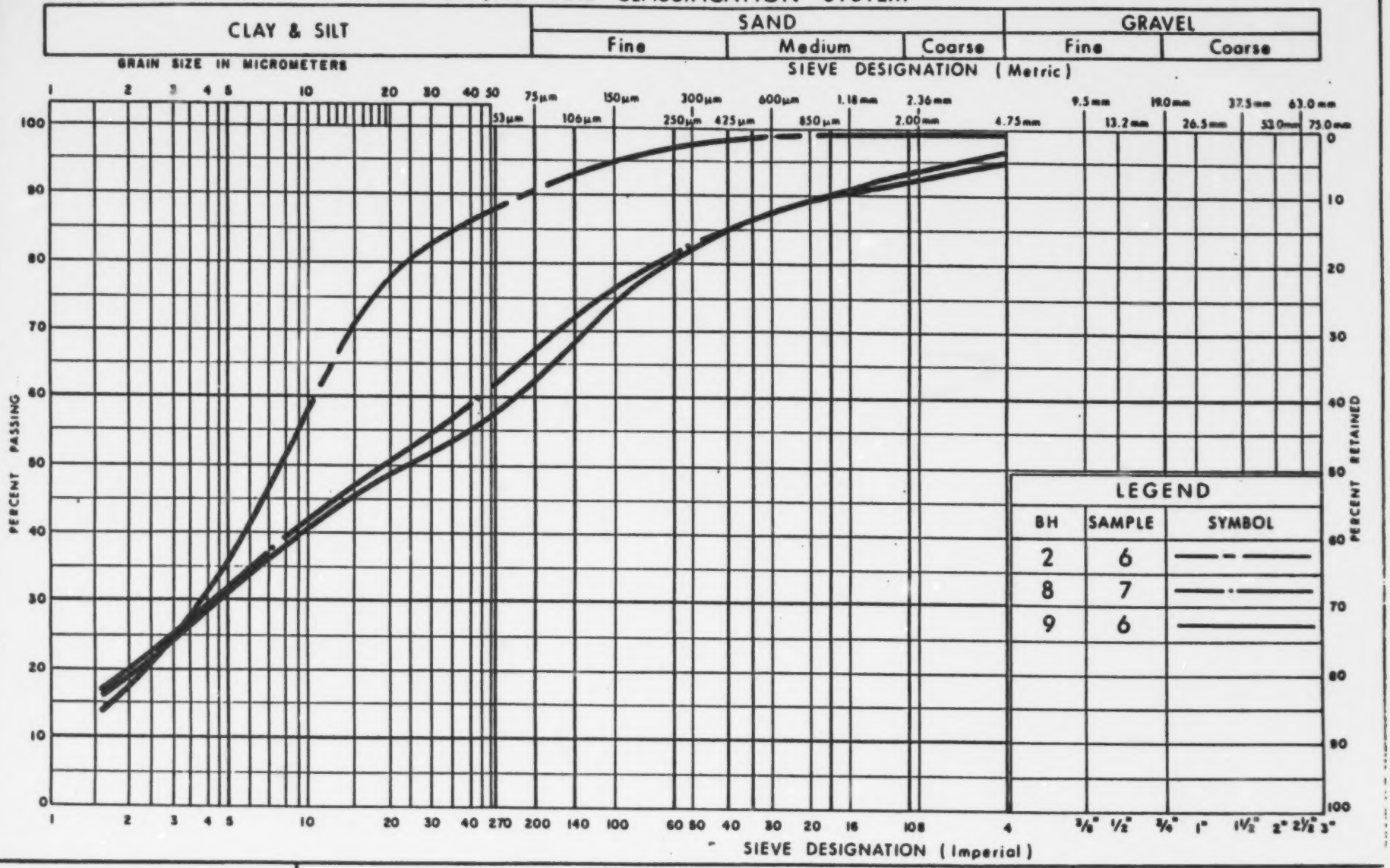


GEO-CANADA	GRAIN SIZE DISTRIBUTION FINE SAND and SILT	FIG No 1 REF. No G-86-1208 DATE JULY, 1987

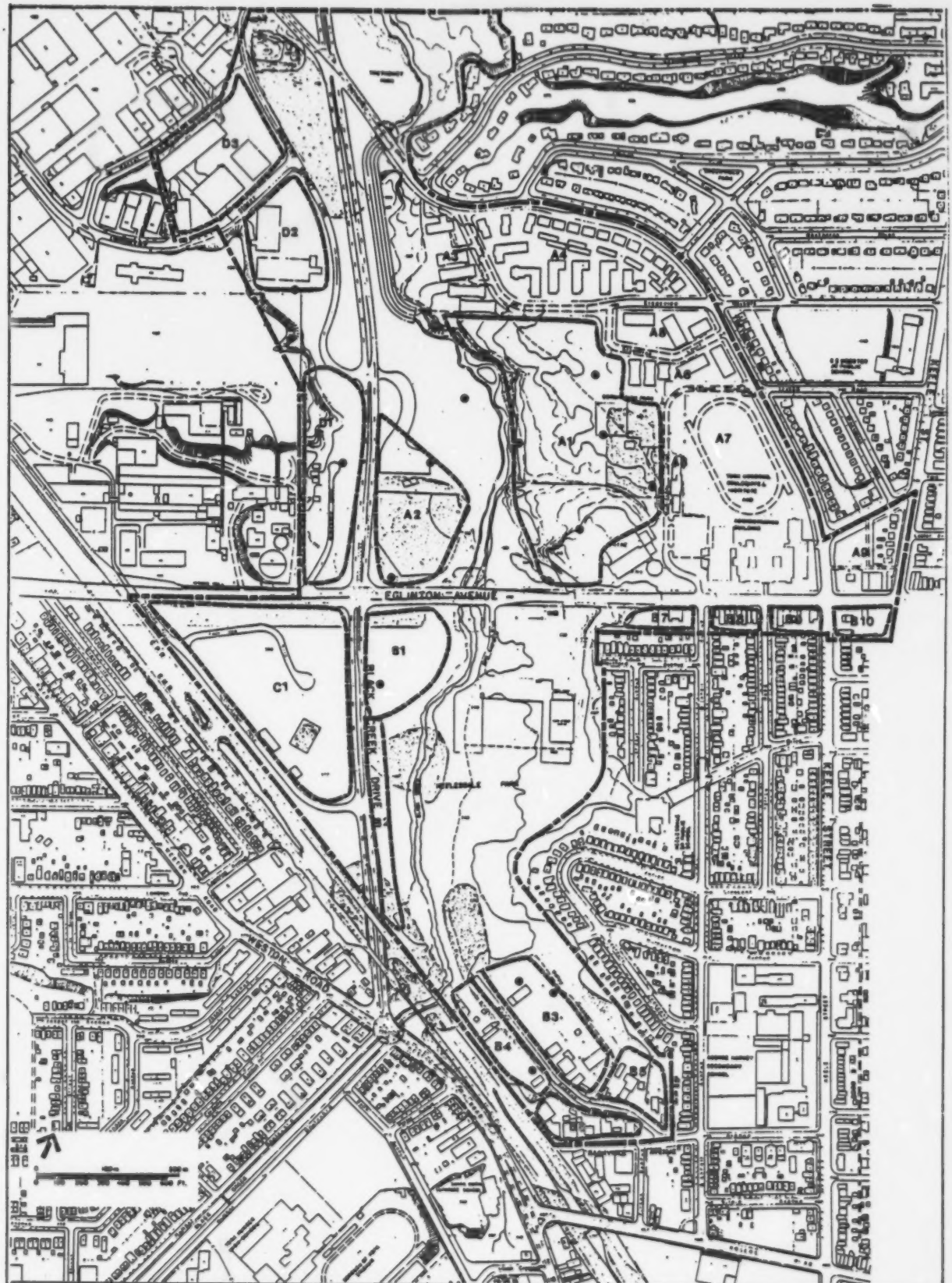


GEO-CANADA	GRAIN SIZE DISTRIBUTION SILTY SAND	FIG No 2 REF. No G-86-1208 DATE JULY, 1987

UNIFIED SOIL CLASSIFICATION SYSTEM


CLAY & SILT
SAND
Fine
Medium
Coarse
GRAVEL
Fine
Coarse
GRAIN SIZE IN MICROMETERS
SIEVE DESIGNATION (Metric)
1 2 3 4 5 10 20 30 40 50 75µm 150µm 300µm 600µm 1.18mm 2.36mm 9.5mm 19.0mm 37.5mm 63.0mm
53µm 106µm 250µm 425µm 850µm 2.00mm 4.75mm 13.2mm 26.5mm 53.0mm 75.0mm
PERCENT PASSING
PERCENT RETAINED
0 10 20 30 40 50 60 70 80 90 100
1 2 3 4 5 10 20 30 40 270 200 140 100 60 80 40 30 20 16 10 8 4
3/8" 1/2" 3/4" 1" 1 1/2" 2" 2 1/2" 3"
SIEVE DESIGNATION (Imperial)
LEGEND
BH
SAMPLE
SYMBOL
2 6
8 7
9 6

GEO-CANADA	GRAIN SIZE DISTRIBUTION SILTY CLAY	FIG No 3 REF. No G-86-1208 DATE JULY, 1987



BLACK CREEK CORRIDOR: FEASIBILITY STUDY
CITY OF YORK

LEGEND

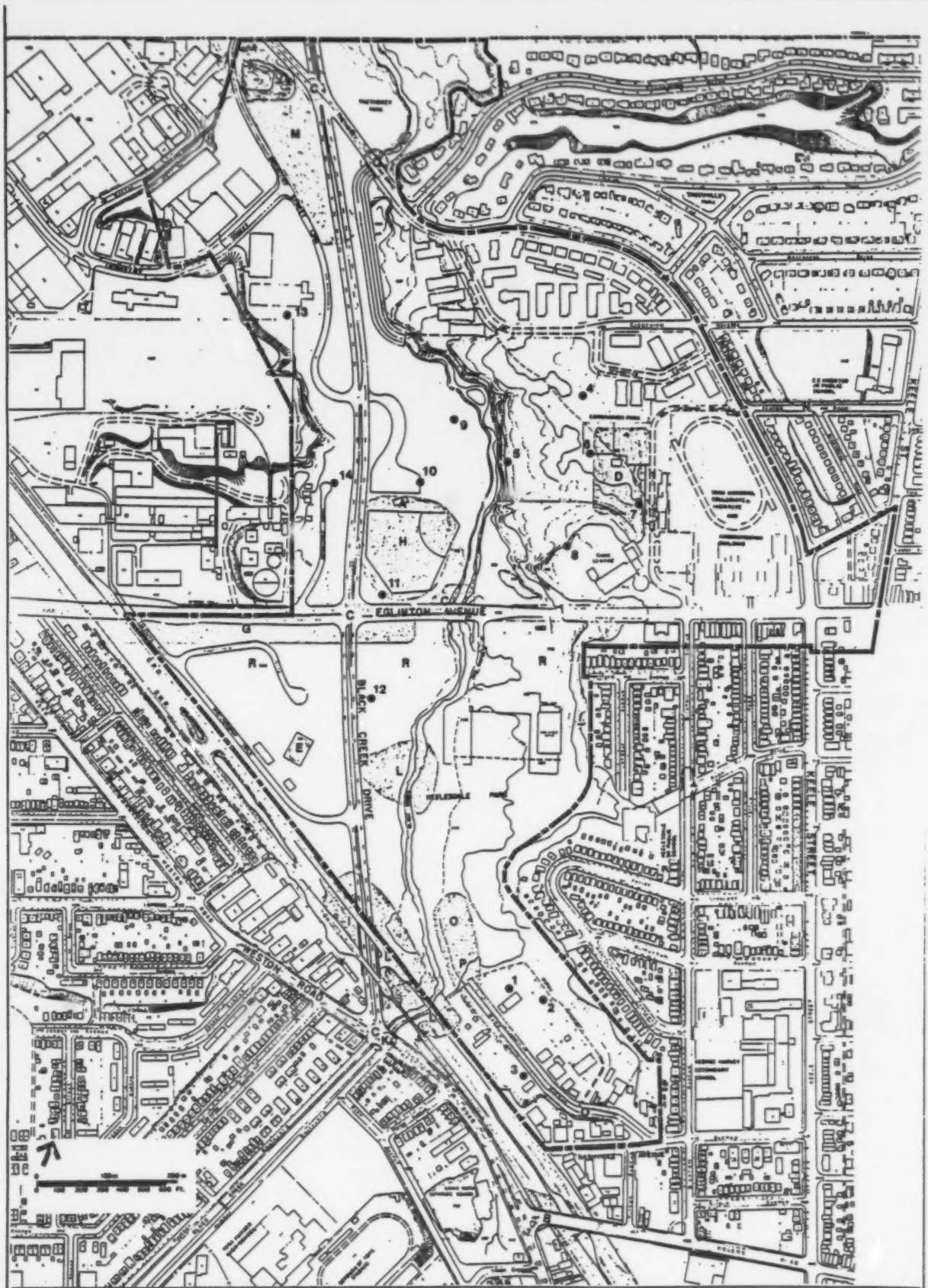
A1 REFERENCE NUMBERS FOR POTENTIAL DEVELOPMENT AREAS WITHIN STUDY AREA.

GEO-CANADA LTD.

POTENTIAL DEVELOPMENT AREAS.

DWG. 1

BASE MAPPING SOURCE: CITY OF YORK PLANNING & DEVELOPMENT DEPARTMENT



BLACK CREEK CORRIDOR: FEASIBILITY STUDY
CITY OF YORK

LEGEND.

● 4 BOREHOLES BY GEO-CANADA LTD. (1977).

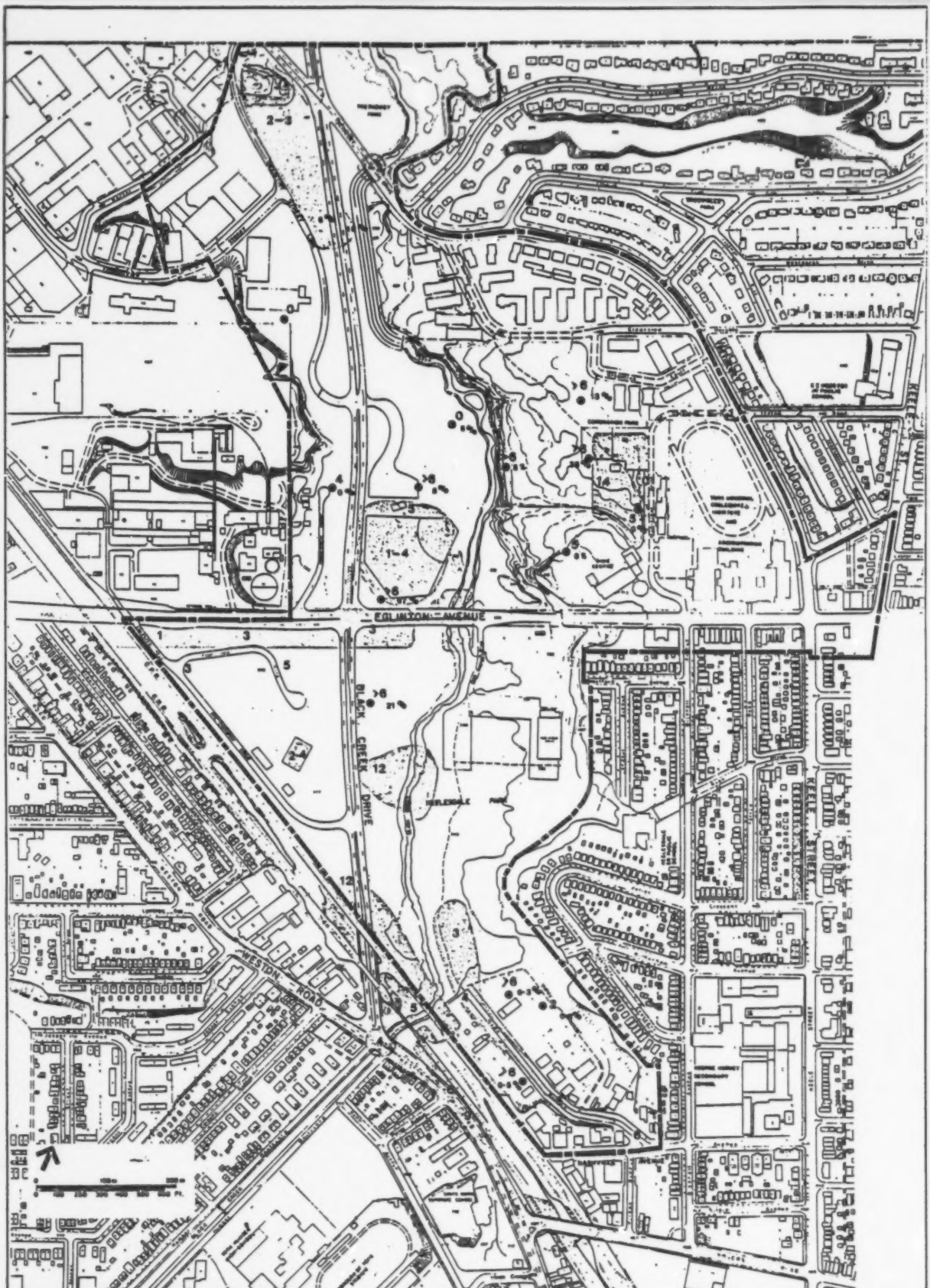
(P) AREAS COVERED BY PREVIOUS INVESTIGATIONS, WITH SOURCE IDENTIFICATION. (SEE TABLE I)

GEO-CANADA LTD.

INFORMATION SOURCES

DWG. 2

BASE MAPPING SOURCE: CITY OF YORK PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT



BLACK CREEK CORRIDOR: FEASIBILITY STUDY

CITY OF YORK

LEGEND

DEPTH OF FILL IN METRES.

METHANE GAS CONCENTRATION.

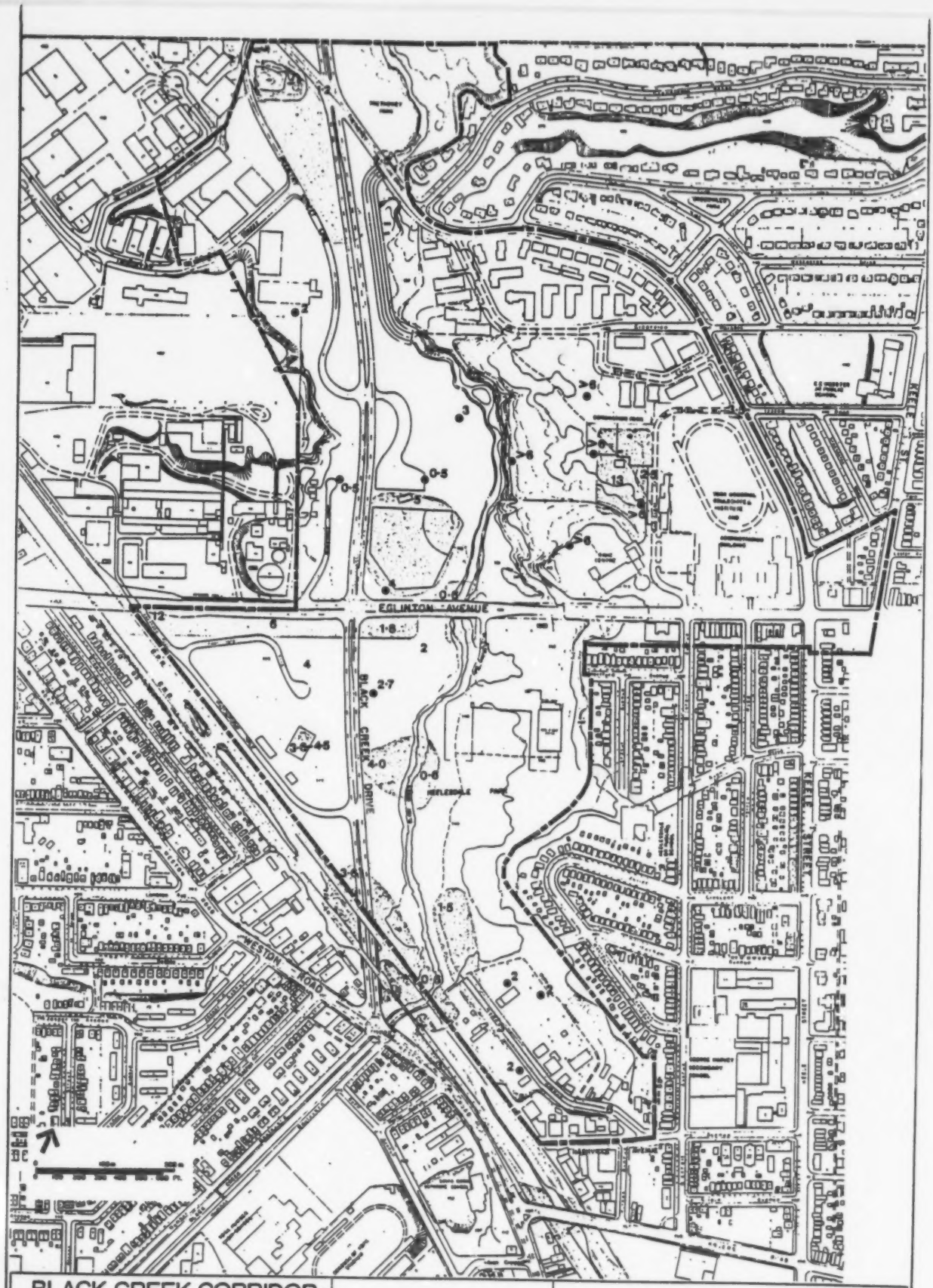
BOREHOLE BY GEO-CANADA

GEO-CANADA LTD.

DEPTH OF FILL

DWG. 3

BASE MAPPING SOURCE: CITY OF YORK PLANNING & DEVELOPMENT DEPARTMENT



BLACK CREEK CORRIDOR: FEASIBILITY STUDY
CITY OF YORK

LEGEND.

DEPTH TO GROUND WATER TABLE IN METRES.

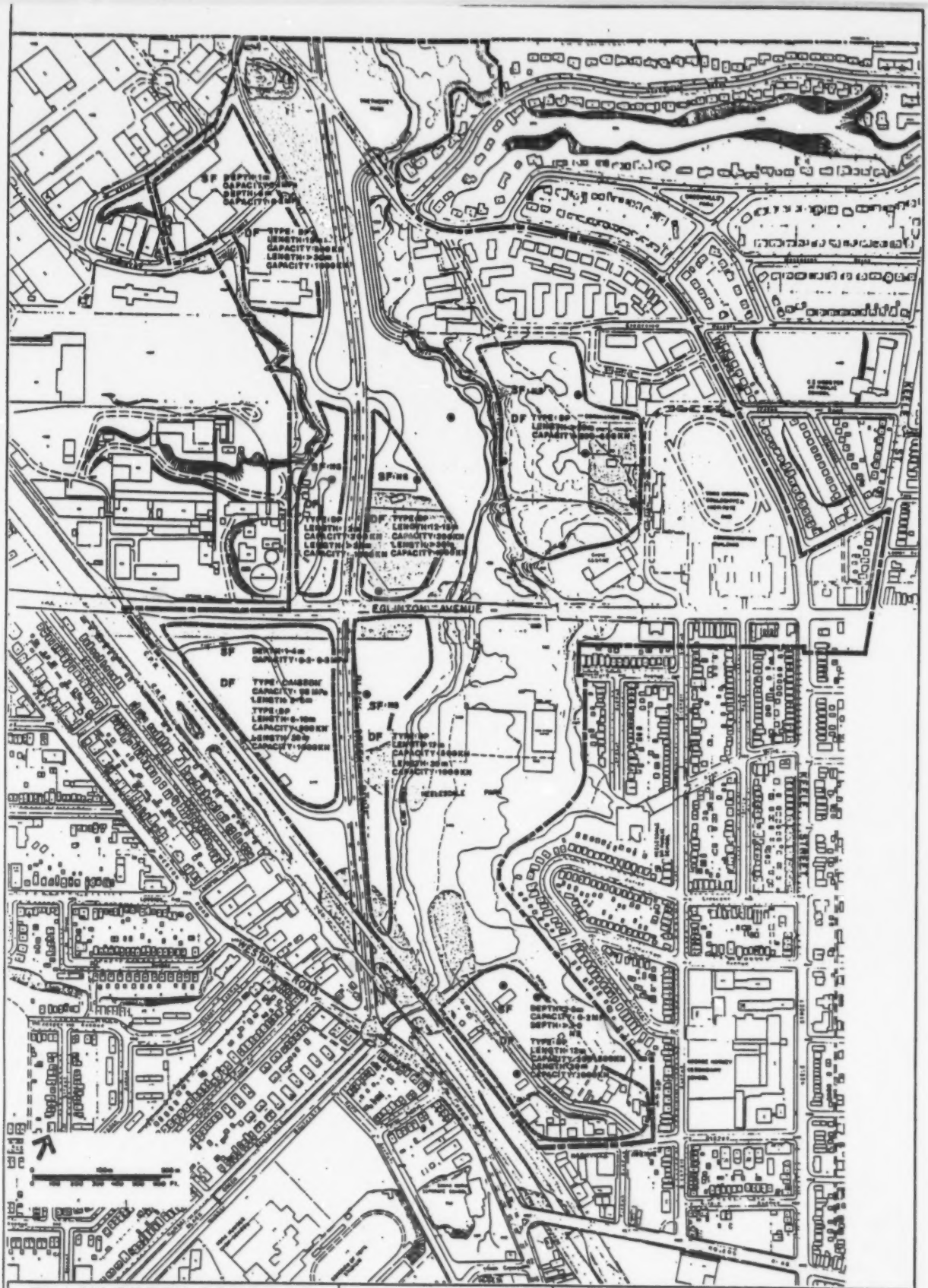
BOREHOLE BY GEO-CANADA

GEO-CANADA LTD.

GROUND WATER

DWG. 4

BASE MAPPING SOURCE: CITY OF YORK PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT



BLACK CREEK CORRIDOR: FEASIBILITY STUDY
CITY OF YORK

LEGEND

- BOREHOLE BY GEO-CANADA
- SF SHALLOW FOUNDATIONS (SPREAD FOOTINGS)
- DF DEEP FOUNDATIONS (CAISSON, PILE)
- DP DRIVEN PILE
- NS NOT SUITABLE
- 0.1 MPa = 1.0 TONS/FT²
- TONNES = TONS

GEO-CANADA LTD.

FOUNDATION OPTIONS

DWG. 5

BASE MAPPING SOURCE: CITY OF YORK PLANNING & DEVELOPMENT DEPARTMENT

APPENDIX D

PLANNING REVIEW

BLACK CREEK CORRIDOR

FEASIBILITY STUDY

PHASE I REPORT - PLANNING REVIEW

FOR

THE CITY OF YORK

MACAULAY SHIOMI HOWSON LTD.
SEPTEMBER 1987

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1. INTRODUCTION

The City of York commissioned a multi-disciplinary consulting team to examine the market potential and development feasibility of the Black Creek Corridor. As one component in "Phase I" (Background Research and Analysis), a review of key planning factors and considerations was carried out by Macaulay Shiomi Howson Ltd.

A wide variety of matters was reviewed in this work, including overall context, existing land use, pattern of ownership, infrastructure of hard services, environmental opportunities and constraints (except geotechnical concerns, the subject of a separate component in the overall study), existing planning policies and controls, and development activity.

The ensuing sections in this report, along with the accompanying figures, will serve to record the findings of this planning review.

2. STUDY AREA DESCRIPTION

2.1 General

The lands determined by the City to fall within the Black Creek Corridor for the purposes of this study are depicted on Figure 1. The study area is located at the southern end of Black Creek Drive, approximately 4.8 km. (3 mi.) south of Highway 400 at Highway 401, in the central part of the City of York. Aside from Black Creek Drive itself, major direct and indirect road connections to the area include Eglinton and Lawrence Avenues, Keele and Jane Streets, Rogers and Weston Roads, and Trethewey Drive.

The study area extends from the municipal boundary on the north (just north of Trethewey Drive where it crosses Black Creek Drive), to Nashville Avenue on the south, one block north of Rogers Road. As the name suggests, the subject area straddles Black Creek itself, with relatively distinct physical boundaries on the east and west, comprised of the C.N./C.P. rail right-of-way, Trethewey Drive/Keele Street and/or the natural edges of the valley itself. Total area of the lands in question is approximately 230 acres.

Most of the key "landmarks" within and adjacent to the study area are identified on Figure 1 - these include parks (Trethewey, Coronation and Keelesdale), institutions (Police Station, York Memorial Collegiate, York Board of Education and the Municipal Administration Offices) and major industrial concerns (Kodak and Gest).

2.2 Existing Land Use

Quite a variety of existing uses can be found within the defined corridor area - these are illustrated on Figure 2. In broad terms, the predominant uses in the area are public parks/open space, and industrial, which together account for almost 80% of the net area (i.e. excluding roads) at issue. The remaining 20% $\pm$ is comprised of residential (mostly multiple) areas, a variety of industrial functions, and strip retail/service commercial uses.

The pattern of existing land use, both within and adjacent to the area, is described in more specific terms in the ensuing subsections below.

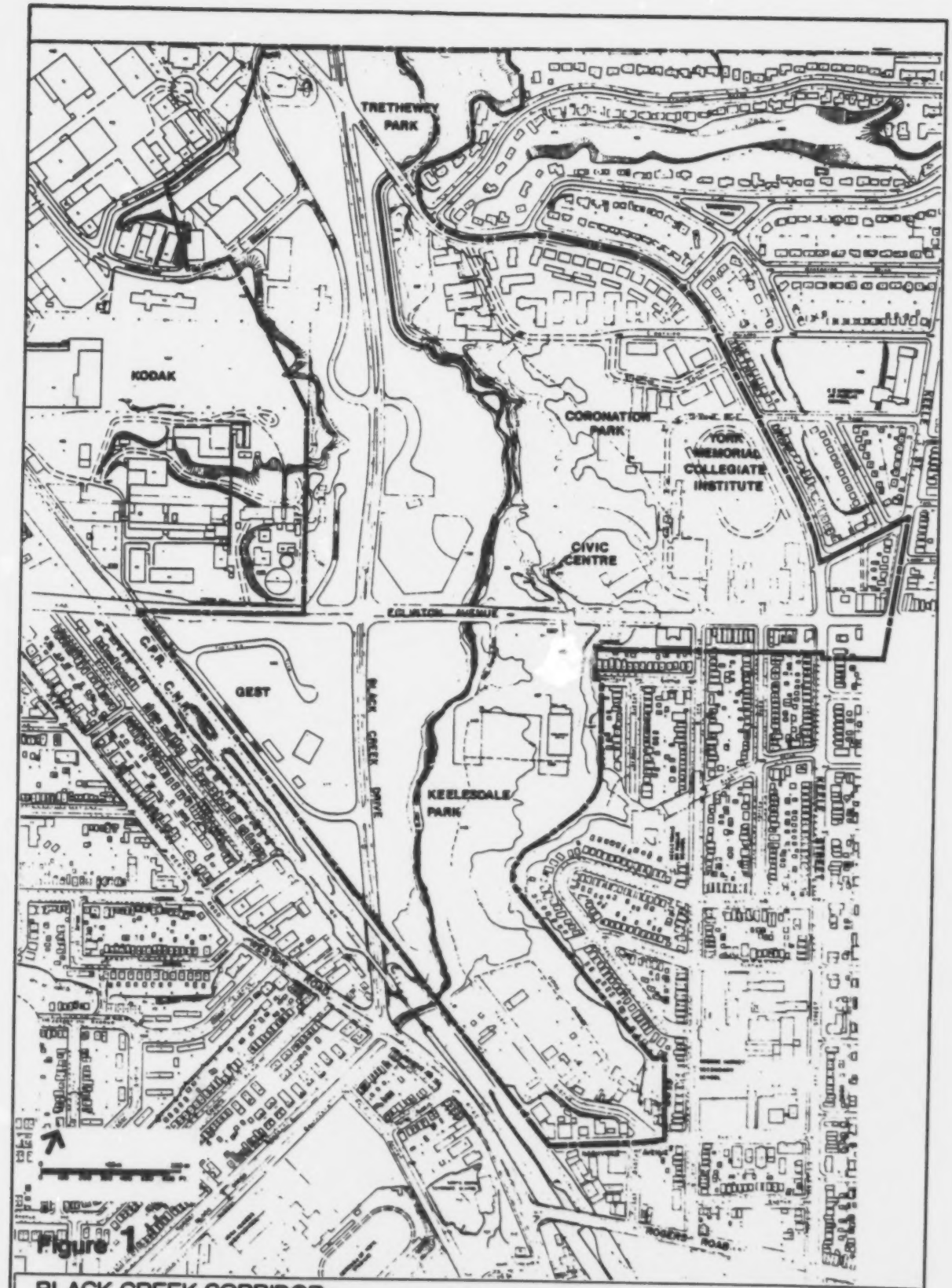

Figure 1

BLACK CREEK CORRIDOR:
FEASIBILITY STUDY
CITY OF YORK

STUDY AREA BOUNDARIES

2.2.1 **Northeast Quadrant**

That portion of the study area north of Eglinton and east of Black Creek Drive is dominated by the public open space and institutional functions related to the York "Civic Centre" and the related park facilities. Existing institutional uses include:

- the 2-storey Municipal Office Building at 2700 Eglinton Avenue West, which sits on a landscaped promontory just west of Municipal drive;
- the adjacent Canadian Centennial Building, which is a community centre and pool;
- the neighbouring building which accommodates York Memorial Collegiate and the Administration Offices for the York Board of Education, on a site of about 3.9 hectares (9.6 acres), including the associated playing field/track behind; and,
- the existing Metro Police facility (No. 12 Division) on the east side of Municipal Drive, which is soon to be relocated to the new building now under construction southwest of the Trethewey Drive/Black Creek intersection.

Other public functions in this quadrant include the substantial Coronation Park, a largely passive open space area (to the east of Black Creek) which wraps around the Municipal Buildings, extends as far north as Clearview Heights Drive, and includes active playground and tennis court facilities as well. Near the westerly edge of Coronation Park, there is a reasonably well-defined valley edge or bank just to the east of the creek bed. The rest of this public open space area is quite rolling, especially in the southwest area between the Municipal Buildings/Police Station and Black Creek itself; some of this portion of the park is heavily vegetated in a semi-natural or "wild" state.

In the vicinity of the Black Creek Drive/Eglinton Avenue intersection, there is a baseball diamond and field house (with associated parking facilities), known as Keelesdale North Sportsfield, which is an "annex" to the Keelesdale Park complex to the south of Eglinton Avenue. North of this diamond, up to Trethewey Drive, the lands

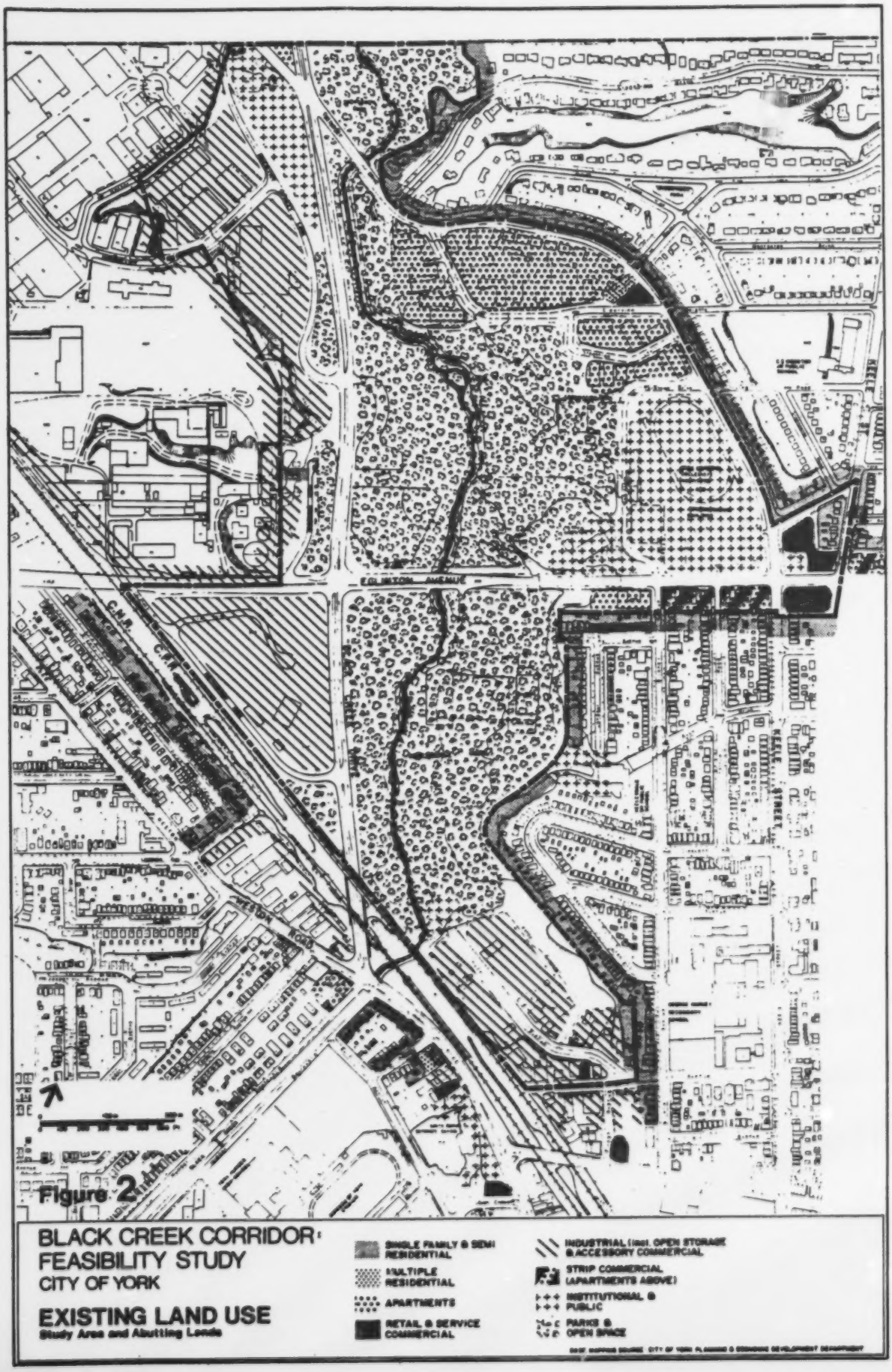
BLACK CREEK CORRIDOR
FEASIBILITY STUDY
CITY OF YORK
EXISTING LAND USE
Study Area and Abutting Lands
SINGLE FAMILY & SEMI RESIDENTIAL
MULTIPLE RESIDENTIAL
APARTMENTS
RETAIL & SERVICE COMMERCIAL
INDUSTRIAL (Incl. OPEN STORAGE & ACCESSORY COMMERCIAL
STRIP COMMERCIAL (APARTMENTS ABOVE)
INSTITUTIONAL & PUBLIC
PARKS & OPEN SPACE

Figure 2

adjacent to Black Creek Drive are occupied by landscaped, passive open space focussed on the stream bed and channel of the Black Creek itself. North of Trethewey Drive, extending east behind the homes on Greenbrook Drive, is Trethewey Park, which interconnects with the valley open space system to the north in the City of North York.

Lands in the small block bounded by Yore Road, Keele Street, Eglinton Avenue and Trethewey Drive are occupied by a variety of older strip retail and service commercial uses oriented to Eglinton (including a Metro Ambulance station right on the corner of Eglinton and Keele); to the rear there is a large parking area in the west half of the block, affiliated with the adjacent supermarket, and a half-dozen single-family residences facing Keele Street.

There is a concentration of older multiple dwellings, comprised of both six-plexes and low-rise apartment buildings, in the Clearview Heights area, bounded by Trethewey Drive, the Black Creek valley, and Coronation Park. This pocket of multiple housing comprises some 33 buildings, many of which appear to be somewhat substandard in terms of their appearance, up-keep, and site development standards. The buildings in question accommodate a substantial stock of rental units (an approximate total of 780 units) and range in height from 2 to 4 storeys. The proportion of landscaped open space on these sites is relatively low, due to substantial building coverages, large paved areas for access driveways and surface parking, and the presence of large banks of detached garages in the rear yards of many of the buildings. Densities for the six-plexes along Trethewey are in the range of 0.7 to 0.8 F.S.I. (floor space index), while the adjacent apartment buildings range from 0.8 to 2.2 F.S.I., with average density in these latter buildings being on the order of 1.2 F.S.I. Adjacent to these multiple residential buildings, there are some local service commercial uses, at the corner of Trethewey Drive and Clearview Heights.

Lands adjacent to the boundary of this quadrant, north-east of Trethewey Drive, are occupied by low density residences. The properties to the east on Eglinton Avenue are part of the retail/service commercial strip in this general locale.

2.2.2 Southeast Quadrant

This quadrant, to the south of Eglinton Avenue and to the east of Black Creek Drive, is dominated by the active and passive areas of Keelesdale Park, which is

bissected by the stream bed of Black Creek itself. Including the lands west of the creek, total area of this public open space is on the order of 13 ha. (33 ac.). Facilities include several baseball diamonds, a soccer pitch, and Keelesdale Arena itself, as well as the associated parking areas.

The other significant land use element in this quadrant is the older industrial area on the south edge of the study area, focussed on Hyde Avenue/Valley Crescent and Nashville Avenue, which is located along the upper edge of the valley wall in this locale. This is a relatively isolated pocket of lower-order industrial/commercial activities, in premises which are generally unattractive and poorly maintained, with unsightly open storage and inadequate site development standards. The majority of the area is occupied by scrapyards and associated metal recycling activities, down in the Black Creek valley adjacent to Hyde Avenue and Valley Crescent. At the end of Hyde Avenue, there is a small municipal utility building which is at the south end of Keelesdale Park. A variety of other uses is also present, primarily oriented to Nashville Avenue, including auto body shops, construction contractors, a building supply outlet and a metal fabricating operation. In terms of built-form, these activities are housed in a "hodge-podge" of small-scale, (1 - 2 storey) basic industrial structures in poor to average condition, with largely uncontrolled and unscreened outside storage of materials and equipment. Apparent site densities do not reflect any consistent pattern, but tend to be less than 0.5 F.S.I. Access to the area is quite awkward, by virtue of the topography and isolating boundary elements - the elevated C.N./C.P. rail lines to the west, the stream bed of Black Creek and Keelesdale Park to the north, and the steep slopes of the valley edge to the east.

There are several small blocks fronting on Eglinton Avenue which are included in this quadrant of the study area. West of Bicknell Avenue is an older, low-rise (4-storey) apartment building containing 49 dwelling units, at a site density on the order of 2.0 F.S.I., and with surface parking to the west of the building. The remaining blocks to the east of Bicknell Avenue consist of street-related shopping/service commercial strips on narrow properties, with typically 2 to 3-storey buildings which accommodate residential apartments above the storefronts.

The east edge of the study area in this quadrant is well-defined by the steep slopes forming the east edge

of the Black Creek valley. Most of the adjacent properties at the top of the slope to the east are low density residential in nature, the prime exception being Keelesdale Public School, which fronts on Bicknell Avenue; its associated playfields to the rear of the school building itself abut Keelesdale Park in the general vicinity of the arena.

2.2.3 Southwest Quadrant

The relatively small portion of the study area south of Eglinton Avenue and west of Black Creek Drive is gently rolling, triangular in shape, and bounded on its south-west edge by the C.N./C.P. rail lines. This area is occupied almost totally by the industrial facilities of G.M. Gest, including several large low-scale "warehouse/office" type structures, open storage of materials and equipment, and large paved areas for parking of employee and company vehicles. The Gest complex is skirted to the southwest by Photography Drive, which provides the main southerly access to and egress from the Kodak site to the north across Eglinton Avenue. There is a small passive open space area adjacent to the signalized intersection of Photography Drive and Black Creek Drive.

As noted previously, the study area in this locale is immediately abutted by the joint right-of-way for C.N. and C.P. rail (which also accommodates GO Transit). Lands to the west of the rail-lines, opposite the Gest property, are in low density residential use, while lands further south toward the Weston Road/Black Creek Drive intersection are in mixed industrial/commercial usage.

2.2.4 Northwest Quadrant

This portion of the study area, north of Eglinton Avenue and west of Black Creek Drive, is irregular and relatively narrow in configuration. It is essentially bounded by the west edge of the Black Creek valley, except adjacent to Eglinton Avenue, where the easterly edge of the adjacent Kodak complex forms the boundary.

The south portion of the area is bissected by a remnant of Keelesdale Drive, formerly a through street, which now intersects with Eglinton Ave. about 75 m. (250 ft.) west of Black Creek Drive, and terminates in a cul-de-sac some 170 m. (550 ft.) to the north. There are two

remaining modest single-family dwellings on the west side of the cul-de-sac bulb. Otherwise, the lands abutting this street are all vacant, although much of the west side frontage is part of the large Kodak complex to the west and forms part of the sloped valley edge in this location. Kodak's ownership also includes certain lands on and below the valley slope adjacent to Industry Street Link (formerly part of Keelesdale Drive). Further to the north, adjacent to the Industry Street intersection, there are two older, low-rise, multi-tenant type industrial buildings which are reasonably visible to/from Black Creek Drive; one of these contains the "York Business Opportunity Centre", an "incubator" facility for establishment of new businesses. Between Bertal Road and Industry Street are four additional industrial buildings of a similar nature, accommodating a variety of small-scale manufacturing, warehousing and service firms on relatively small sites with fairly high coverage. Most of the "island" surrounded by Industry Street Link, Trethewey Drive and Black Creek Drive will soon be occupied by a new 2-storey District Headquarters and Division Station for the Metropolitan Toronto Police, which is currently under construction. The south end of this "island" is public open space which includes the landscaped boulevards of the abutting roads.

Lands to the west of this quadrant of the study area are occupied by a wide variety of heavy and general industrial uses, including the substantial complex of Kodak Canada immediately to the west. The size and nature of the Kodak facilities represent a significant "presence" in this area, and exert a strong visual impact on this portion of the Black Creek Corridor. It is regrettable that some of Kodak's industrial activities and processes on this site produce a less-than-attractive visual impression, especially given its close proximity to the Black Creek Drive/Eglinton Avenue intersection.

2.3 Land Ownership

The pattern of land ownership in the Corridor is in some respects quite irregular, due to the vagaries of the topography, the historical pattern of development, and the substantial proportion of public ownership involved. The latter factor relates largely to the Provincial (M.T.C.) assembly some years ago of lands to accommodate a then-planned southern extension of Highway 400, apparently including an interchange at Eglinton Avenue.

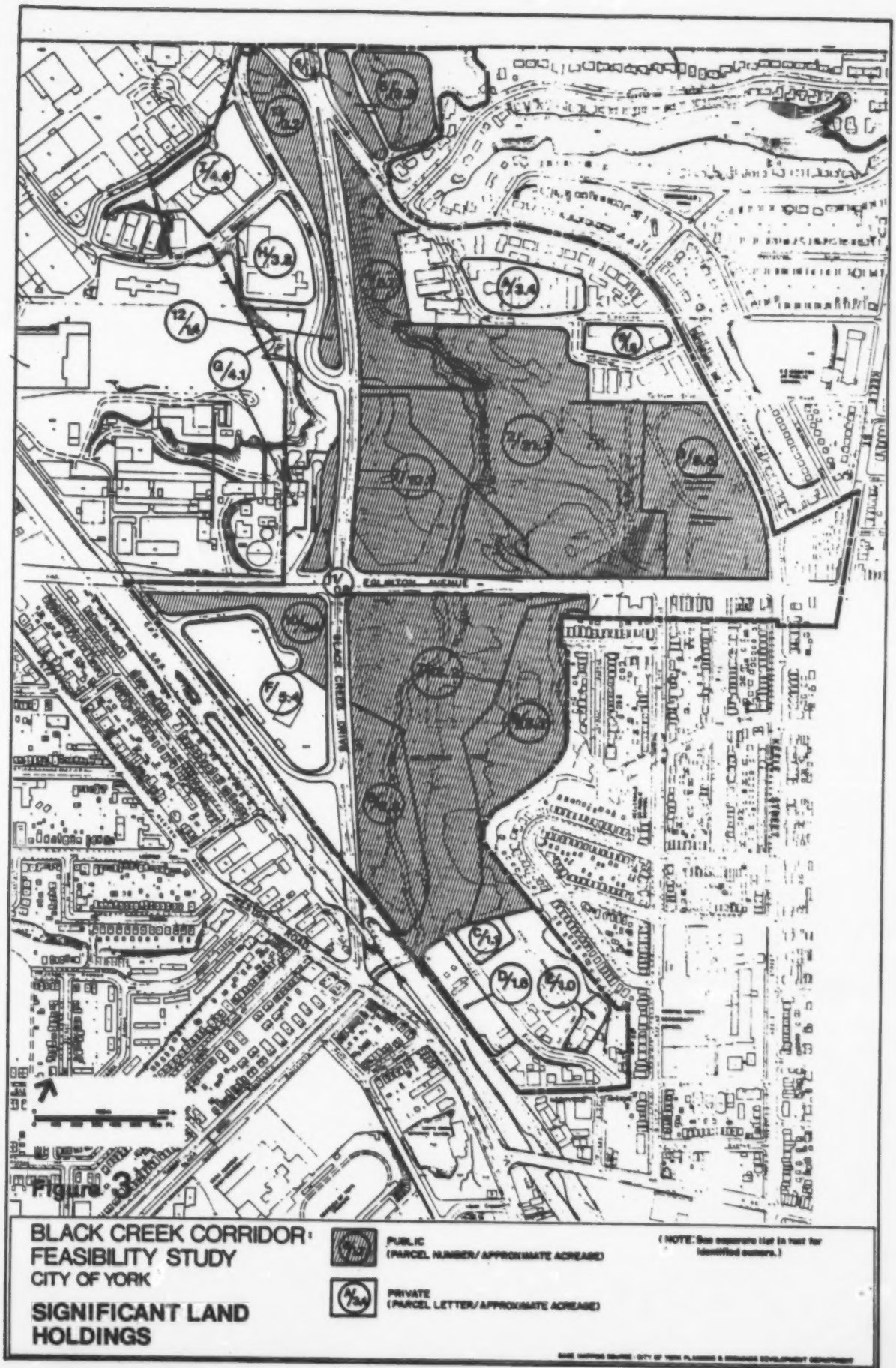
EGLINTON AVENUE
BLACK CREEK DRIVE
BLACK CREEK CORRIDOR
FEASIBILITY STUDY
CITY OF YORK
SIGNIFICANT LAND HOLDINGS
PUBLIC
(PARCEL NUMBER/ APPROXIMATE ACREAGE)
PRIVATE
(PARCEL LETTER/ APPROXIMATE ACREAGE)
(NOTE: See separate list in text for identified owners.)

Figure 3

This freeway project never proceeded, Black Creek Drive was constructed as a limited access arterial alternative, and much of the original 400 assembly remains in M.T.C. ownership, although some of it is leased to other parties and public agencies.

The accompanying Figure 8 outlines the significant land holdings in the Corridor and the corresponding chart below identifies the ownership details.

SIGNIFICANT LAND HOLDERS

PUBLIC

OWNER	PARCEL NO. (FIG. 3)	APPROX. AREA AC.
Ministry of Transportation & Communications	1,4,5,7,10,11, 12	24.1
City of York	2,6,8,9	40.0
York Board of Education	3	9.6
Metropolitan Toronto	13	3.2
TOTAL		95.1

PRIVATE

OWNER	PARCEL LETTER	APPROX. AREA (AC.)
Cummer-Yonge Investments	A	3.4
S. Diamond Investments	B	1.7
Waxman Recycling Industries	C,D	2.7
Krenwig Holdings	E	1.0
G.M. Gest	F	5.4
Kodak Canada	G	4.1
Sable	H	3.4
Lehndorff Canada	I	4.4
TOTAL		26.1

As the foregoing chart indicates, of the significant land holdings identified on Figure 3, a very significant proportion (almost 80%) are in public ownership. Of the small, less significant parcels not outlined on Figure 3, almost all are in private ownership.

The pattern of public ownership, not surprisingly, relates directly to the originally-planned alignment of Highway 400 extension, the major institutional functions in this locale and the open space/park areas associated with the Black Creek itself. As a result, these public parcels tend to be focussed on the central part of the study area, especially the key intersection of Black Creek Drive and Eglinton Avenue. In contrast, the significant private parcels identified tend to be scattered on the periphery of the Corridor, with the prime exception being the Gest lands (parcel F on Figure 3), a short distance southwest of the above-noted intersection.

2.4 Hard Services

Based on information obtained from the City's Works Department, it is apparent that the municipal infrastructure of hard (piped) services does not represent a significant overall constraint to major development in the Black Creek Corridor. At the "regional" (Metro) level, sanitary trunk and watermain facilities are obviously in place and technically available, by way of new connections, to serve new development in this area. There may, however, be a need for the City to obtain additional capacity allocation.

On a more localized level, there are a number of areas where new development will require upgrading to the local servicing facilities - these include the Industry/Bertal area, the Clearview/Greentree area, and the Valley/Hyde area. In addition, as a general consideration for the whole Corridor area, the local watermains are quite old and will require upgrading to serve new development. With regard to storm water, the City controls runoff and discharge for new development by way of municipal by-law.

2.5 Rail Activity

As noted earlier, the southwest edge of the identified Black Creek Corridor is bounded by the C.N./C.P. rail rights-of-way. Based upon information obtained from

appropriate representatives of both railways, plus GO Transit, the level of activity on these trunk lines (current to early 1987) is as follows:

- Mactier Line (Canadian Pacific)
  - total two-way traffic over 24-hour period is typically 10 trains
  - all trains are freight, and do not follow set schedules
- Weston Line (Canadian National)
  - total two-way traffic over 24-hour period is typically 34 trains
  - 10 trains are freight (unscheduled)
  - 14 trains are VIA passenger (usually between 7. a.m. and 11.30 p.m.)
  - 10 trains are GO Transit (morning and evening rush hours)

Hence, it is apparent that total two-way rail traffic on these parallel C.N./C.P. rights-of-way is typically 44 trains a day, almost half of which carry freight and run on an unscheduled basis.

2.6 School Board Facilities

As indicated earlier, the York Board of Education owns and occupies a substantial property at the east edge of the study area, immediately east of the Municipal Buildings and Police Station. It has an approximate area of 9.6 acres, with substantial frontage of both Eglinton Avenue and Trethewey Drive.

The Board's facilities at this location include both the central Administration Offices and the school building (some of which is designated historic) and playfield for York Memorial Collegiate Institute. The latter component includes a substantial proportion of the site devoted to a running track and soccer/football field, (plus some school parking), which occupy about 2.2 ha. (5.4 ac.) on the north portion of the site.

Contact was made with an appropriate representative of the York Board of Education to explore their future

intentions for the property, particularly with regard to the evident potential for intensification/development to occur on the playfield/track area described above. The area involved is substantial and could serve a meaningful purpose in contributing to the evolution of the corporate/civic focus desired by the City of York.

Preliminary discussions with Dr. Jack Murray, planning consultant to the Board, yielded the following information of relevance, which is summarized below:

- there are no apparent immediate plans to alter the school facilities, aside from placement of portables on the corner of the playfield, to relieve current overcrowding; however, the Board is reviewing other longer-term solutions;

- the Administration Centre is also experiencing problems, including overcrowding, shortage of parking and service/delivery difficulties; the Board is apparently considering solutions which would not include new buildings, but instead would involve reorganizing existing facilities such as relocating administrative staff to other schools; and,

- in principle, there is likely to be great reluctance on the Board's part to give up the playfield/track site for development.

In spite of the foregoing, Dr. Murray implied the Board would likely be open-minded and prepared to consider any comprehensive development scheme for the playfield/track site which could incorporate benefits for both the Board and York Memorial, such as a new administration centre or wing and/or replacement recreational facilities (e.g. such as an elevated running track on the roof). In fact, it is likely that such is the <u>only</u> basis on which the Board would entertain any development schemes involving the track site. The apparent potential of this site warrants further exploration, particularly in light of the imminent obsolescence of the adjacent Police Station, which is to be relocated to the new facility at Black Creek Drive and Trethewey.

2.7 Environmental Opportunities & Constraints

Figure 4 herein illustrates the key environmental factors which could be foreseen to influence new development and/or redevelopment in the Black Creek Corridor.

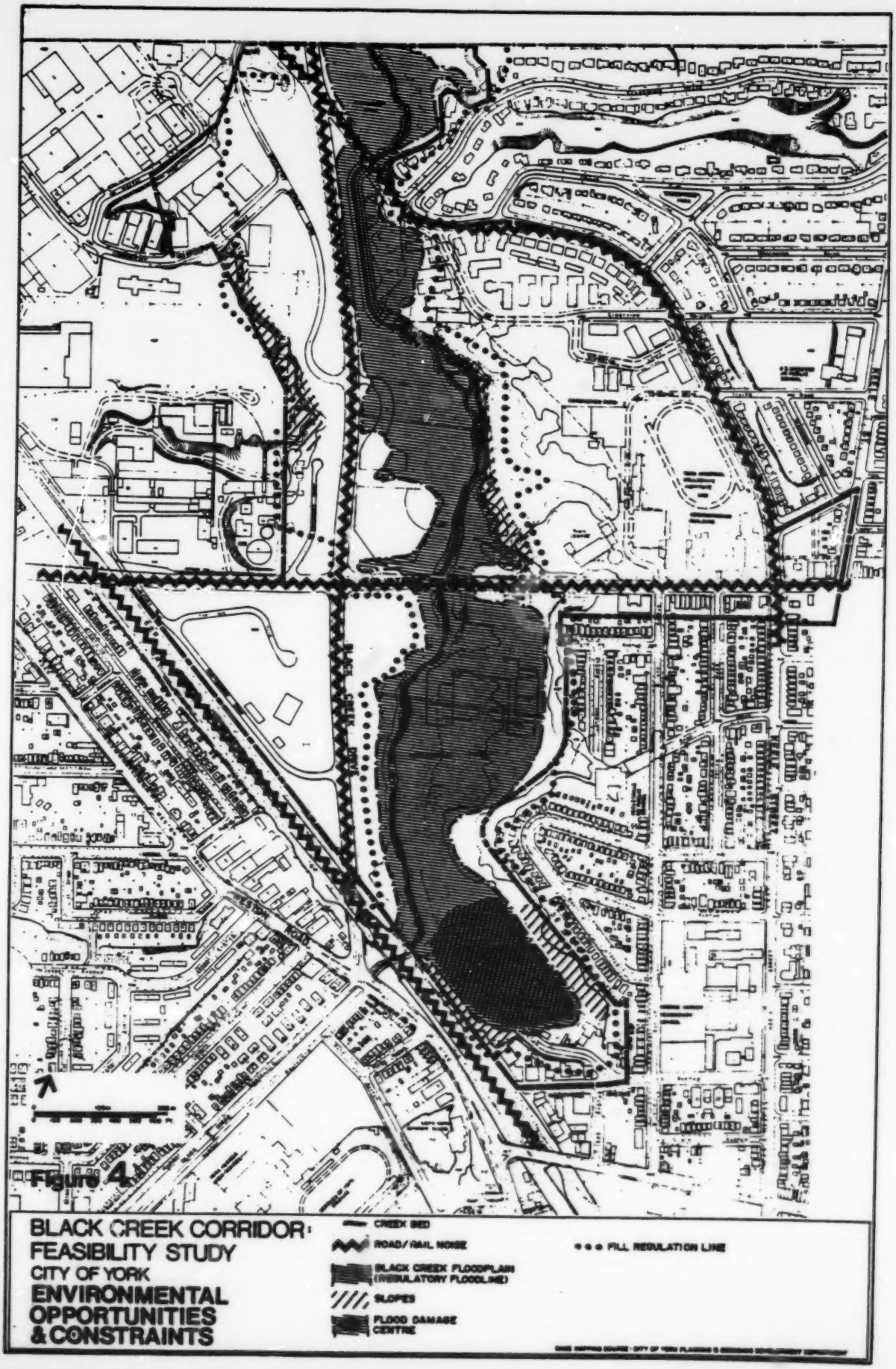
BLACK CREEK CORRIDOR:
FEASIBILITY STUDY
CITY OF YORK
ENVIRONMENTAL
OPPORTUNITIES
& CONSTRAINTS
CREEK BED
ROAD/RAIL NOISE
BLACK CREEK FLOODPLAIN
(REGULATORY FLOODLINE)
SLOPES
FLOOD DAMAGE
CENTRE
FILL REGULATION LINE

Figure 4

The attractive valley setting represents a significant potential amenity, which lends a degree of natural identity and character to this desired civic focus. Indeed, the presence of the creek itself, if properly respected, can represent a significant natural feature which enhances the man-made design elements inherent in adjacent development projects.

Preliminary input to this study by a citizens' environmental group called "Black Creek Project" has confirmed and emphasized the desirability of sustaining and enhancing the natural amenity of the Black Creek setting for the proposed corporate/civic centre. This setting offers potential for both augmented recreational activities and aestetic benefits, consistent with sensitive environmental management which enhances the urban focus sought by the City.

A number of the objectives, principles and concerns raised by Black Creek Project relate to site-specific design and construction details or environmental management practices for the actual creek bed and banks, and thus do not directly relate to the type of broad-brush planning/policy review inherent in this study. However, a number of planning-related objectives and matters raised by the group do bear mentioning as a basis for raising the City's environmental and aesthetic "consciousness" in the context of efforts to establish the desired corporate/city focus. These include the following:

- maintain/encourage existing recreational uses, and improve recreational potential by establishing a network of trails for walking, cycling and skiing

- develop a linear park system by connecting the Black Creek Corridor with surrounding areas and creating continuous recreation space along the east side of Black Creek Drive

- provide safe crossings for hikers, cyclists, etc. where the park meets major roads

- improve access to the valley, especially for the elderly and handicapped; future transportation links should encourage access to parks and trails

- recognize the importance of integrated water management to the quality of the urban environment, in terms of controlling flooding, maximizing water quality, and making beneficial use of water for landscaping and aesthetic features - an example is

the use of multiple purpose ponds to reduce downstream flooding, to allow settling out of contaminants, to provide wildlife habitats and to augment recreational space/opportunities.

The foregoing consideration of Black Creek (and its valley) as an environmental amenity must recognize that the creek also acts as a significant development constraint, due to the extent of land affected by flooding potential during major storm events. As indicated on Figure 4, the floodplain associated with this section of Black Creek (as defined by the Conservation Authority's "regulatory floodline") cuts quite a broad swath through the study area. Lands within this defined floodplain (i.e. lower in elevation than the calculated flood level during the regulatory or "regional" storm event) are prohibited from development due to the inherent flooding hazard in such major storm events. Hence, to the east of Black Creek Drive, development potential is limited to relatively confined areas which are outside the calculated flooding influence of the creek. However, it should be noted that the construction of roads is normally permitted within the identified regulatory floodplain. In addition, surface parking areas for buildings (which themselves have to be outside or above the floodline) can be below the regulatory floodline, as long a they are outside the area affected by a 100-year storm event, which is a less severe and more frequent occurrence than the "regional storm".

In addition, the Metropolitan Toronto and Region Conservation Authority has also established a broader "zone" outside (i.e. above) the regional floodline, within the "fill regulation line", wherein development is not prohibited, but is subject to scrutiny and the issuance of a permit by the Authority. The fill regulation line is shown on Figure 4.

Within the substantial swath of lands in the study area which are encumbered by the floodplain, the Conservation Authority has given special status to the Hyde Avenue/Valley Crescent area by designating it as a "Flood Damage Centre". As noted above, further development/redevelopment would normally be prohibited on such flood-prone lands, but the designation recognizes the subject area as having been historically developed within the floodplain. Hence, it is appropriate that this area be treated as a "Special Policy Area", in accordance with Provincial policy on floodplain management.

The Province has laid out a series of procedures whereby areas of existing development in the floodplain such as Hyde/Valley may be accorded "Special Policy Area" status; granting of such status would recognize the subject area as one which has historically existed in the floodplain, and where strict adherence to certain Provincial policies governing new development would create undue hardship.

Once such Special Policy Area status is obtained, controlled development or redevelopment may be permitted, subject to identifying the minimum acceptable level of protection. For the Hyde/Valley area, preliminary discussions with the Conservation Authority have indicated that:

- to the extent that land use change may be contemplated in this area, by way of redevelopment, the Authority would be supportive of York seeking "Special Policy Area" status for these lands, in accordance with normal Provincial procedures; and,

- the minimum acceptable level of protection in this area, in terms of floodproofing of buildings and structures, would be the 350-year storm event, which is a much lower standard than the "regional storm" (Hurricane Hazel) that establishes the normal regulatory floodline discussed previously.

The information on Figure 4 also includes a schematic identification of slope areas of concern which affect the subject development area in terms of both their potential aesthetic value and their potential effect as a constraint on development. Virtually all of the identified slope areas are within the Conservation Authority's "fill regulation line" discussed earlier in this section.

One final environmental influence reflected on Figure 4 is road and rail noise, generated to a degree which is potentially significant enough to have an impact on future development. It is beyond the terms of reference of this study to examine the degree of noise exposure involved, and the range of corresponding mitigation measures for the affected lands. Such analysis is best undertaken on a site-specific basis at the time of development design and consideration, in recognition of the different noise sensitivity of various land uses and building forms, and the differing site circumstances involved.

3. EXISTING PLANNING POLICIES & CONTROLS

3.1 Metroplan

The Metropolitan Toronto Official Plan establishes a planning framework to guide growth and development in the Area Municipalities at a strategic level, relating to matters of Metropolitan significance. More specifically, Metro's planning initiatives are focussed on physical infrastructure, regional parks, and the broad distribution of population, employment and housing.

The "Urban Structure" map contained in Metroplan identifies the Black Creek valley through the subject area as "Regional Open Space", and the existing industrial lands in the study area are shown schematically as "Industrial Area".

The policies of Metroplan relating to "Centres" include a heirarchy comprised of the Central Area ("downtown" Toronto), major subcentres in North York (Yonge North) and Scarborough (Town Centre), and intermediate sub-centres at several other strategic Metro locations. Of a lower-order importance, but nevertheless still significant from the Metropolitan perspective, is the creation of a "principal focus" for each of York and Etobicoke, as evidenced by the following policy (Section 4F of Metroplan):

"Council recognizes the need for each of the Boroughs of York and Etobicoke to create a principal focus of commercial and community activities related to the social, cultural and economic functions of their populations. Therefore, Council shall support actions of those Boroughs, including development or redevelopment, to establish such commercial and community focus in each of the Boroughs of York and Etobicoke, providing such actions are consistent with other policies of this Plan and are located as generally indicated as "civic centre" by Figure 5."

The map referred to in the foregoing clause schematically designates a "civic centre" in the vicinity of the existing York Municipal Building on Eglinton Avenue west of Keele Street. It is largely this Metropolitan encouragement, plus the parallel but unfulfilled objective of the City of York to establish an integrated civic focus, which has given rise to this very study.

With respect to transportation, the recent "Network 2011" document, and the resulting proposed Metropolitan Amendment No.8, led to changes in the planned "Urban Structure" to provide schematically for a future Eglinton West rapid transit line running from the Spadina Subway Line to the west Metro border. This same future transit facility is also reflected on the maps depicting "Designated Metropolitan Centres" and "Major Transportation Facilities", respectively. Parallel textual provisions relating to transit are proposed to be modified by Amendment No. 8, to refer to this future facility, as distinguished from existing and committed elements of the Metropolitan transportation system. As indicated in the companion Phase I transportation analysis of this Black Creek Corridor Study, the timing of implementation for the Eglinton West line is quite unclear, and at this juncture, falls behind the planned Sheppard rapid transit line, in terms of Metro priority; further review of that priority is apparently to occur in or before 1992.

Major roads in the study area of Metropolitan (arterial) significance, and their designated right-of-way widths, are as follows:

- Black Creek Drive - 45m (148 ft.) and over north of Eglinton Avenue
  - 36m. (118 ft.) south of Eglinton Avenue
- Eglinton Avenue West - 30m. (98 ft.) west of Keele Street
  - 27m (89 ft.) east of Keele Street
- Keele Street - 27m (89 ft.)

On the issue of housing and residential development, Metroplan's objectives include maintenance of *"...the existing stock of sound housing in neighbourhood settings"*, and the encouragement of *"...new residential development to locate near employment activities and transportation facilities at appropriate densities"*. Furthermore, Metro Council is supportive of policies to respond favourably to the need for:

- *"... major increases in the amount of housing suitable for senior citizens."*
- *"... significant increases in rental accommodation."*

Metroplan also indicates support for increases in the residential stock by "... *encouraging appropriate residential development in commercial areas, especially in mixed-use developments.*" This is further extended to Metro support for Area Municipal initiatives which increase the supply of housing by various means, including:

- o *"... mixed-use development as may be appropriate in commercial centres and districts."*
- o *"... redevelopment or rehabilitation of blighted or obsolete structures."*
- o *"... redesignation of land uses which have become inappropriate."*

Metroplan objectives related to the assignment of residential densities to various areas and sites by local Municipalities include regard for the capacity of Metropolitan services, the efficient use of land, the integration of appropriate residential development in commercial centres, and the relationship of residential densities to levels of transportation services.

Regarding parks/open space and environmental considerations, Metroplan designates the existing open space in the Black Creek valley as "valley lands" which are part of the "Principal Resources of the Parks and Open Space System". Furthermore, the Black Creek Valley is designated as one of Metro's "Major River Valleys". Development of valley lands is to be restricted to park uses having low impact on flood control and water conservation practices, and natural/aesthetic qualities of the valley. In addition, valley land is to be retained in its natural state to the extent possible. Further Metroplan policies govern development adjacent to major valleys, including establishment of a "valleyland impact zone", and other matters such as policy direction regarding appropriate setbacks from stable and unstable slopes.

3.2 City of York Official Plan

The prevailing land use designations governing the study area and immediately abutting lands under the existing York Official Plan are depicted on Figure 5. The designations shown are those found on District Plans 2 and 4, which cover the area in question. Before discussing these in detail, however, it should be noted that the City's overall "Development Concept" found on Schedule

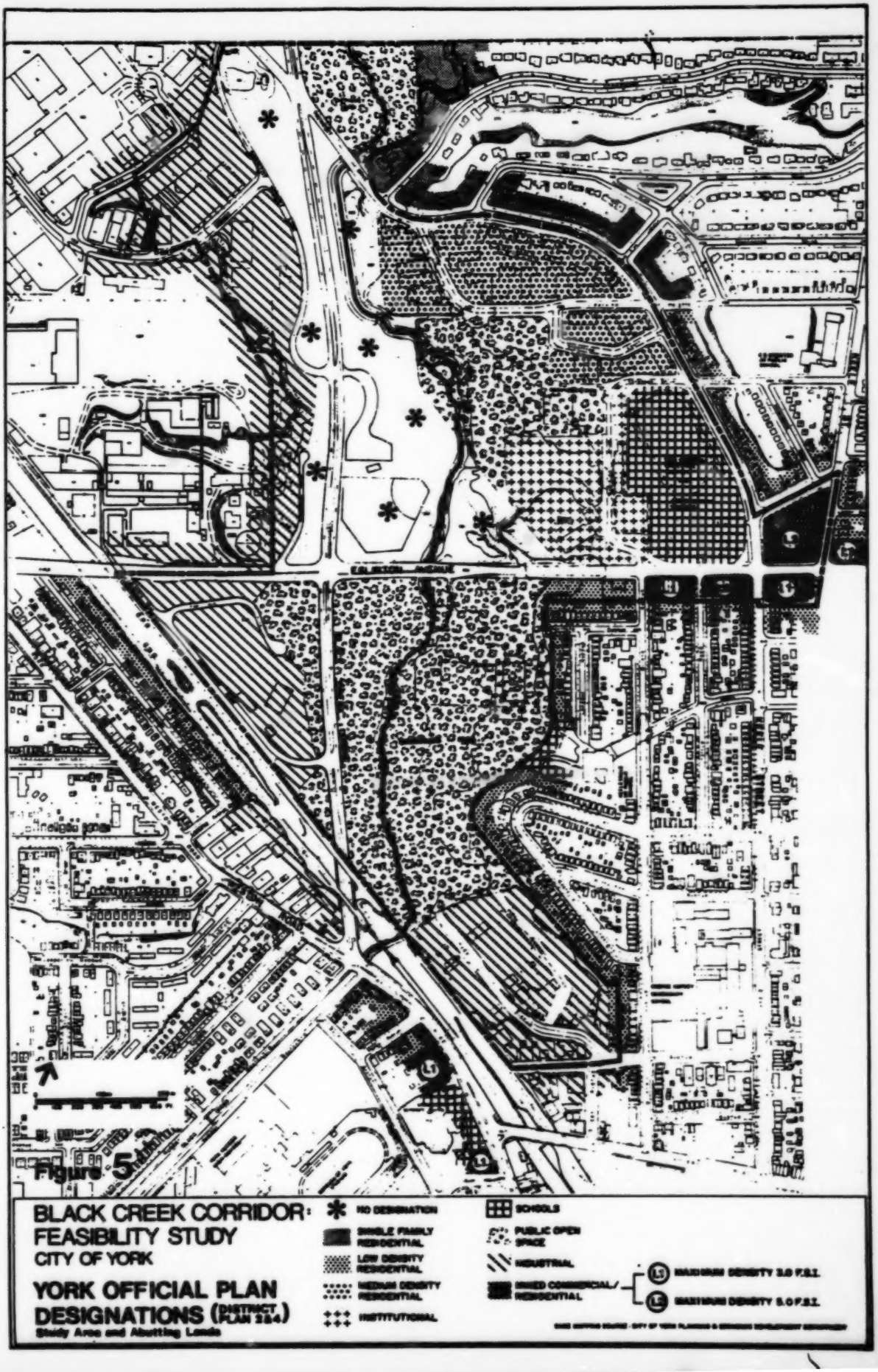
EGLINTON AVENUE
BLACK CREEK CORRIDOR: FEASIBILITY STUDY
CITY OF YORK
YORK OFFICIAL PLAN DESIGNATIONS (DISTRICT PLAN 28.4)
Study Area and Abutting Lands
NO DESIGNATION
SINGLE FAMILY RESIDENTIAL
LOW DENSITY RESIDENTIAL
MEDIUM DENSITY RESIDENTIAL
INSTITUTIONAL
SCHOOLS
PUBLIC OPEN SPACE
INDUSTRIAL
MIXED COMMERCIAL/ RESIDENTIAL
MAXIMUM DENSITY 2.0 F.S.I.
MAXIMUM DENSITY 5.0 F.S.I.

Figure 5

"A" to the Official Plan schematically identifies the existing municipal office/education complex as "Municipal Centre". This would to a degree be consistent with the thrust of Metroplan's civic centre/principal focus policies for this general location described previously; however, it would appear to be limited to a recognition of the existing major institutional functions, as there is little textual support in the City's Official Plan which would correspond to the multi-dimensional scope of the "civic centre" that is both encouraged in Metroplan and sought by the City through the medium of this study.

The "Development Concept" on Schedule "A" also reflects in schematic fashion the existing valley lands and adjoining Coronation Park as "Major Open Space", while the entire area of existing industrial uses between Black Creek Drive and the C.N./C.P. lines is identified as an "Industrial Concentration".

Turning back to the specific designations introduced earlier, as shown on Figure 5, there is a substantial swath of land (several hundred feet wide) from the north municipal limit at Trethewey Drive to Eglinton Avenue, which carries no land use designation. This area corresponds roughly to the original M.T.C. assembly (described in a previous section of this report) intended for the Highway 400 south extension. The balance of the study area carries a series of land use designations which, subject to some minor discrepancies, reflect in most cases the existing uses on the ground.

The areas designated "Industrial", which include the Bertal Road/Industry Street, Photography Drive/Keelesdale Road and Hyde Avenue/Valley Crescent Areas, currently permit a full variety of industrial uses. The companion industrial policies, among other things, encourage the consolidation, renewal and improvement of such areas by replacement of incompatible or non-permitted uses.

A "Medium Density Residential" designation is applied to the cluster of multiple buildings found in the Clearview Heights/Greenview Court/Trethewey Drive area. All types of dwelling units are permitted, subject to a maximum density of 124 units per hectare (50 units per acre) and a maximum F.S.I. of 1.0.

The "Institutional" land use designation applying to the existing Municipal Offices and Police Station contemplates a wide variety of institutional functions of a public, religious, health-related and educational

nature. In addition, there is a specific policy statement relating to the "Insitutional" designation which contains the existing "Municipal Centre", wherein *"...development of a concentration of governmental, educational and cultural uses will be encouraged."* The adjoining Board of Education facilities carry a separate and distinct "School" designation.

The commercial strips within the study area fronting on Eglinton Avenue east of Bicknell Avenue are designated "Mixed Commercial/Residential", with composite density factors of either "LI" (3.0 F.S.I.) or "L2" (5.0 F.S.I.), of which the residential component may typically be a maximum of 1.0 F.S.I. or 2.0 F.S.I. respectively. Surprisingly, the existing apartment building on the south side of Eglinton Avenue west of Bicknell avenue is not recognized with the appropriate medium or high density designation, but rather is designated "Low Density". This apparent non-conforming status would seem to reflect the City's long-term intent that this use cease to exist, and be replaced by some form of low density function.

The final land use designation found in the study area is probably the largest in extent - "Public Open Space". It applies to all of the park/open space areas in this section of the Black Creek valley, including Trethewey, Coronation and Keelesdale Parks. This category permits the expected range of park, recreational and conservation uses.

Aside from the foregoing primary designations, the York Official Plan also identifies certain districts as "Community Improvement Areas". Within the study area the Keele/Eglinton commercial strip is designated as a "commercial improvement area", while the Hyde/Valley area is categorized as an "industrial improvement area". In both cases. several criteria apply to the consideration and phasing of improvements to be undertaken, including matters such as:

- o commercial
  - physical deteration of buildings and/or facades
  - existence of inadequate parking and/or loading facilities and traffic circulations
  - conditions and (in)adequacy of municipal services

- o industrial
  - poor maintenance of properties
  - inadequacy of access to road or rail
  - presence of conflicting or incompatible land uses.

3.3 City of York Zoning By-law

The existing zone categories applicable to the subject area according to the City's comprehensive Zoning By-law (#1-83, as amended) are depicted on Figure 6.

The institutional and multiple residential uses in the north-east quadrant are zoned "R2 - Two-Family Dwelling House District". This category permits all "R1" uses (one-family dwellings plus home occupations, and the usual range of supporting institutional functions), plus duplexes, semis, converted houses, and certain local institutional uses. The numerous low-rise apartment buildings and six-plexes in this area are apparently not recognized as permitted. Regulations applying to the "R2" zone include a maximum floor space index of 0.6, and a maximum building height of 3 storeys.

The commercial portion of the study area along Eglinton east of Bicknell Avenue is zoned "C2 - General Commercial District", which permits all "C1" (local commercial) uses, plus a wider variety of commercial activities such as auto-oriented uses (e.g. service station, car wash), hotels/motels, building supply outlets and funeral parlours.

Key "C2" regulations include a maximum floor space index of 3.0 (1.0 or 124 u.p.ha./50 u.p.a. for residential component in a mixed-use building), and maximum building height is 18.3 m (60 ft.).

The two most prevalent zones in the study area are the "M - Manufacturing District" and "G - Green Open space District". The "M" zone covers all of the existing industrial areas and extends on an oblique angle to include a small area east of Black Creek Drive north of Eglinton Avenue; this appears to be an historical circumstance which predates the construction of Black Creek Drive. The City has recently completed a review of industrial areas with respect to operative policies and zoning regulations, which will soon give rise to a

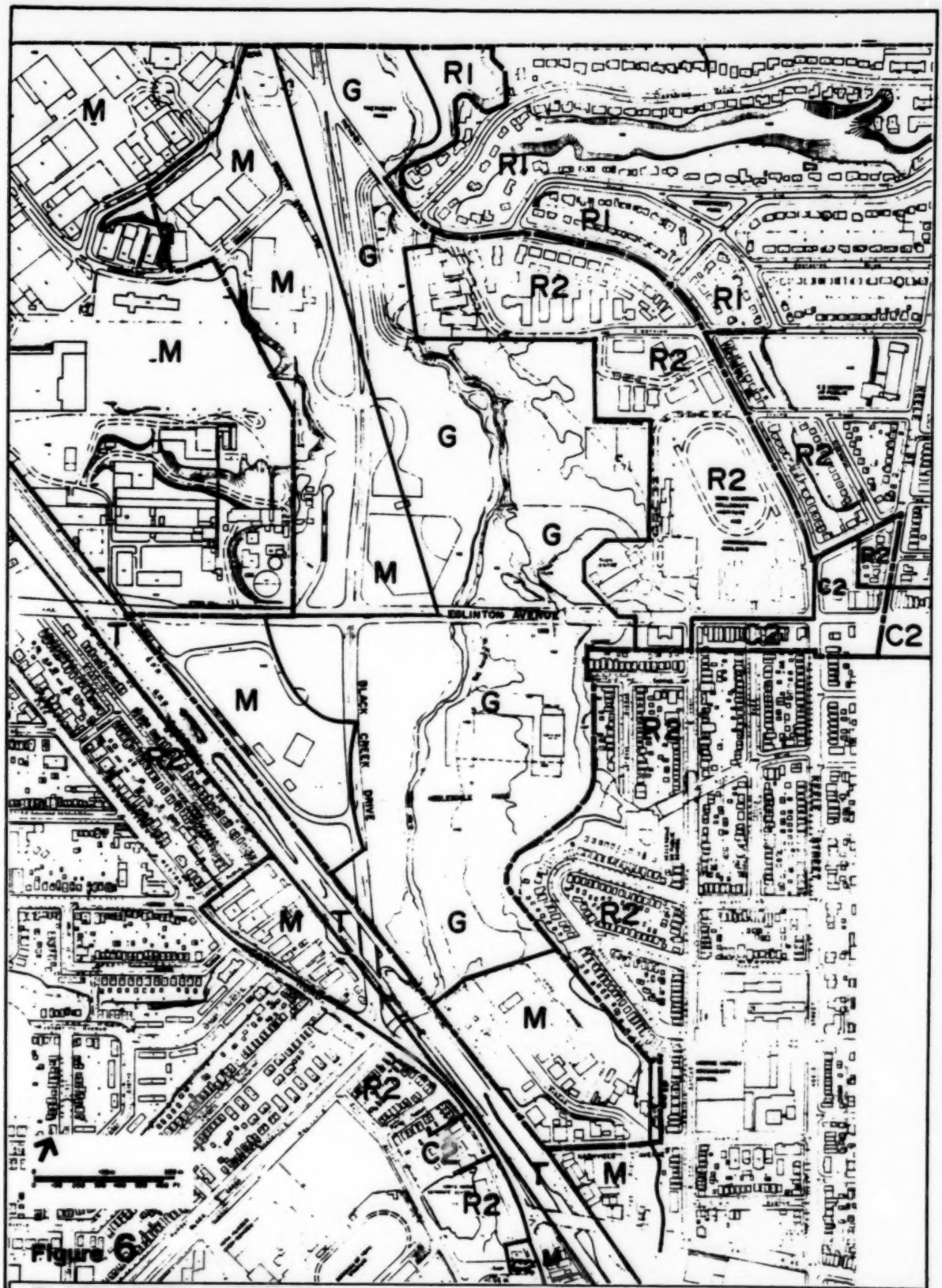
M
G
R1
R2
C2
T
EGLINTON AVENUE
BLACK CREEK DRIVE
BLACK CREEK CORRIDOR:
FEASIBILITY STUDY
CITY OF YORK
EXISTING ZONING
By-law 1-83, As Amended
STUDY AREA BOUNDARY
ZONING DISTRICTS
R1- ONE-FAMILY DWELLING HOUSE
R2- TWO-FAMILY DWELLING HOUSE
M - MANUFACTURING
C2 - GENERAL COMMERCIAL
G - GREEN OPEN SPACE
T - TRANSPORTATION & UTILITIES

Figure 6

more sophisticated zoning framework governing industrial development. However, these new provisions are not yet in effect so the pre-existing, broad "M" category remains in place for all industrial areas. Consequently the range of uses permitted covers a wide spectrum of industrial activities, except for noxious or dangerous uses such as a slaughterhouse or gas refinery; permitted accessory or supporting uses include restaurants, gas bars and any municipal use. Regulations in the "M" zone include a maximum building height of 18.3 m (60 ft.)

The "G" zone covers a broad swath through the middle of the study area, corresponding more or less to the areas of public parks and open space. Permitted uses are restricted to public parks, playfields, playgrounds, golf courses and cemeteries, plus accessory uses.

4. DEVELOPMENT ACTIVITY

Although this sector of Metropolitan Toronto and the City of York was originally developed many years ago, recent development activity or preliminary proposals on several fronts in and around the study area appear to evidence increasing interest in the desirability and potential of the Black Creek Corridor.

Projects which are committed include the following:

- Metro Toronto Police Station - As noted in a previous section of this report, a new 3-level police station is currently under construction on a 1.3 ha. (3.2-acre) site at the southwest corner of Trethewey and Black Creek Drives. It will accommodate both the No. 1 District Police Headquarters and the No. 12 Division Police Station, in a building of about 2,500 sq.m. (27,000 sq.ft.). This development should serve to strengthen the existing and desired major institutional function in the planned corporate/civic centre.

- Kodak - Kodak Canada, which already has a strong presence in the area, is currently in the process of implementing a substantial investment to consolidate and integrate its operations from Brampton on the existing 10-hectare (25-acre) site immediately adjacent to the study area, between Industry Street and Eglinton Avenue. The program includes refurbishing of existing buildings and construction of a new automated facility with a floor area of 5,575 sq.m. (60,000 sq.ft.).

- York Business Opportunity Centre - A 3-year Provincial grant has facilitated the establishment of small business "incubator" centre within an existing multi-tenent industrial building at 221 Keelesdale Drive (also known as Industry Street Link), a short distance off Black Creek Drive.

Current proposals by way of formal applications are as follows:

- Former Dominion Store Property - This large (5.7 ha./14 ac.) site located on Rogers Road just south of the study area is now in the hands of a major commercial developer, who at the time of writing was proposing to develop a multiple-use complex including a mixed industrial/commercial mall of up to 52,000 sq.m. (560,000 sq.ft.) and 160 apartment.

- Humber College - A branch campus of Humber College is proposed for a site at the southeast corner of Black Creek Drive and Eglinton Avenue.

In addition to the foregoing, preliminary enquiries and informal discussions have occurred or are on-going with various development interests, relating to the future potential of the three strategic corners (i.e. northeast, southeast and southwest) of the Black Creek Drive/Eglinton Avenue intersection. Potential schemes discussed have been of a major multiple-use nature, including high-rise condominium residential, hotel, and community college components, plus some office and major retail elements.

5. CONCLUSIONS

This final section of the planning review serves to report the key conclusions which result from the various findings contained herein.

- The **locational context and boundaries** of the identified "Black Creek Corridor" study area are such that much of it enjoys a **degree of relative isolation** or separation from adjoining areas. As such, typical concerns engendered by major land use change (particularly high density redevelopment), with respect to compatibility and adverse impact, are lessened to a considerable degree by this relative isolation, especially as compared with most other Metro sub-centre locations involving major development or redevelopment.

- The **high degree of public ownership** of key lands in the Black Creek Corridor is of **substantial benefit** to the City of York in its efforts to initiate and control implementation of the desired corporate/civic centre concept. On the other hand, the number of public agencies involved and the extent of some of the holdings places special emphasis on the **need for proper coordination**, both among those agencies and any private sector development interests which become involved (e.g. by joint venture, etc.).

- The existing **infrastructure of hard services** does not, in principle, appear to represent a constraint to redevelopment and/or intensification of use in the study area. However, additional capacity allocation in terms of Metro trunk services may be required, and from a local perspective, there are a number of areas where new development will require upgrading to local servicing facilities.

- The **level of rail activity** on the abutting trunk lines for both C.N. and C.P. suggests it is likely significant enough to represent an environmental constraint, especially regarding safety and noise impact on any nearby proposals for residential (re)development.

- Given its relative size and strategic location, the future development potential of the **playfield/track site** affiliated with York Memorial Collegiate bears further exploration with the Board of Education; such consideration should be on the

basis of replacement by incorporation of this and/or other educational/recreational facilities within any development scheme which consequently emerges. The apparent potential of this site would be enhanced by the impending obsolescence of the adjacent Police Station.

- The attractive valley setting of the Black Creek Corridor provides a special opportunity to capitalize on a **significant degree of natural amenity**, by emphasizing the system of public open space along Black Creek as a focus for the planned corporate civic centre - benefits to be achieved would be both recreational and aesthetic.

- Development of a "**principal focus**" for the City of York is clearly seen to be of **Metropolitan significance**, and thus is expressly stated and supported in the policies of Metroplan.

- The current policies of the **City's Official Plan** do not provide an **inadequate framework** for the multi-dimensional corporate/civic centre which is the City's objective; the Plan's existing "Development Concept" appears to be focussed only on the major institutional functions at the existing "Municipal Centre", and there is currently no policy or designation basis for integrated, multiple-use civic focus, which is significantly broader in both functional and spatial terms than the Municipal Centre currently envisaged in the York Official Plan.

- The **prevailing zoning** in the study area is largely **out-of-step** with the pattern of existing uses on the ground; it will have to be updated, not only to reflect any land use changes resulting from this study, but also to properly govern existing uses recognized by the Official Plan where no changes are contemplated.

- A number of committed and proposed development projects and several preliminary proposals in and around the Black Creek Corridor would seem to indicate an increasing level of **marketplace interest and confidence in the future potential of the area**; this interest appears to be largely for development of a nature consistent with the desired corporate/civic centre, including mixed-use schemes encouraging the necessary synergy of activities in the area as a whole.